AMERICAN CINEMATOGRAPHER

FOR AMATEUR AND PROFESSIONAL PHOTOGRAPHERS

February, 1940

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Front Cover

Lee Garmes, A.S.C., Producer

HERE is the crew on the set of "And So Goodbye," which Lee Garmes, A S C, is producing for RKO and for which he will produce two more Garmes is standing with arms behind him directly behind the man kneeling The set, constructed by the company, is of Central Park, that famous southern frame at the south of the great area at an hour when all lamps are illuminated

Among those also shown are A Edward Sutherland, director; Lester White, director of photography, Joe Nadel, production manager, Bob Stillman, assistant director; Stephen Gooson, art director; James Potevin, gaffer; Fred Williams, assistant grip; Bill Wilmarth, sound, Truman Joiner, grip, Fred Guard, painter; E Fredricks, operator of camera

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THREE GREAT FILMS

By George Blaisdell

THOSE who are privileged to look upon "Abe Lincoln in Illinois" cannot escape the realization from the first scene of the production that great as it is in all the essentials of a motion picture the photography of James Wong Howe stands out It stands out among the superlatives in this story of the Great American

It carries the story literally from the first scene right to the very last The final shot is of the retreating, departing train from the Springfield station starting the President-to-be on his way to Washington. The camera is directly to the rear centre of the train, perhaps one or two hundred feet from the end of the rear platform In the front of the dimly lighted train a column of brilliantly white smoke climbs and streaks into the air, as vivid as a flash of lightning. It is breath-taking.

It follows the good-bye talk of Lincoln to his friends and neighbors—as dramatically and emotionally effective as one may believe. For practically two hours the house has been quiet, tense, except for an occasional chuckle, subdued or hearty, interspersed by rapidly recurring chokes. The art of the author, playright and actor has been combined in throwing into this scene every conceivable bit of drama.

The cinematographer responds, perfectly sealing a notable photographic contribution that may be expected to last for a long, long time

Raymond Massey may have been preceded on the screen by nine Lincolns some of them bearing closer resemblance to the Great Emancipator than himself No one of them so closely resembled in action the man they were portraying It was a splendid representation, one that may do for the North what "Gone with the Wind" is doing for the South

Nor will the South be less enthusiastic over "Abe Lincoln of Illinois" than will the North RKO-Radio has not pussyfooted on the political angle It has permitted Lincoln to talk on the screen as he did in the flesh For this we may thank primarily the author, Robert E Sherwood, and the adapter, Grover Jones, for their courage in following the truth and for the production authorities in backing them up

Gene Lockhart is Stephen A Douglas —a great characterization Ruth Gordon portrays Mary Todd Lincoln—with thought only of the ambitious, dominant woman she represented Mary Howard lends to the play the one touch of sentiment As Ann Rutledge her appearance is all too short

Jack Armstrong in the person of Howard Da Silva came from the stage company to play the part of the town bully, the leader of the Clary Grove boys When Armstrong and Massey tangle in the wrestling bout they stage one of the best rehearsed performances ever seen in a picture. It thrills.

Vernon L Walker, A.S.C., is credited with the special effects—splendidly and effectively executed

There is one actor in the picture who does not appear in the printed cast, the man who stands in the shoes of John Brown This is the director, John Cromwell. He makes it plain to his audience he can do more than tell an actor how to put on a part. He can put it on himself

"Abe Lincoln in Illinois" is a must picture for any normal person who is interested in the United States.

•

FOR sheer beauty in picturemaking "The Blue Bird" perhaps tops anything that has preceded it. For this Technicolor production Twentieth Century-Fox spared neither time, effort nor for that matter money in the making of this subject. Above all else, it is a photographer's picture—a technician's picture, if you will Lights and lenses tell the story—pretty but not deep, an appeal to the eye all the way but not so often to the heart; deep thrill inspired by the storm and fire in the forest, unforgettable in its terror, in the seeming hairbreadth escapes of the trio from destruction by the falling in flames of giants of the forest.

At the cameras were Arthur Miller, A S C, and Ray Rennahan, A.S.C In charge of the special effects was Fred Sersen The art direction was by Richard Day and Wiard B. Ihnen, with the set decorations by Thomas Little The sound was supervised by E Clayton Ward and Roger Heman.

These were the men to whom credit for an unusual production mostly were due. Shirley Temple as Mytyl was cast in a part somewhat different from the usual assignment—in a role wherein she was more of a natural, everyday youngster, where she wanted what she wanted when she wanted it The miss is growing up, perhaps faster than is realized by her producers.

The three central figures, or possibly four, were, with Shirley, Johnny Russell as Tyltyl, the brother, Tylo, transformed from a dog into a man, and Tylette, from a cat to a woman. Tylo was played by Eddie Collins, who changed his name either for the occasion or for good, and gave a fine portrayal. Gale Sondergaard was Tylette, a splendidly feline characterization

The picture is well worth seeing, by all children of all ages for its own sake; by all others at least for its beauty.

•

WELL, it had to be sooner or later, and although later it had to be by the afternoon of January 20 Tickets for 'Gone with the Wind" were unobtainable at the Carthay for any time Saturday or Sunday—that was a Friday inquiry At the same time the information was to the effect the United Artists Theatre had unreserved performances forenoons and afternoons Saturday and Sunday, with reserved shows for evenings

So at 1 05 Saturday afternoon yours truly secured tickets and took up position outside United Artists Theatre behind some thousand or so waitees, while for thirty-five minutes he watched another thousand take place behind him. Only 2100 tickets were sold, waiting for the break to come at 1·40 It was an experience in a really hot sun and went to show what human beings will undergo when properly aroused by an astute press agent

Sometimes it is possible one is too expectant regarding glories to come. Perhaps contributing to this "show me" at-

Presenting William Wade, new president of the Los Angeles 8mm. Club On the night he was installed he was awarded the first prize at the annual banquet "It May Happen to You" really was a fine picture. It has to be to get away with anything at the 8mm. It was, too, a vacation picture. Now the club each year awards a notch on the Horton Vacation Trophy, a very fine cup Hearty applause followed the announcement that President Wade gets his name carved on the cup as well as winning first prize. The one picture was good enough to call for the second

titude is having stood too long in line or to having secured a seat too far front and off on one side, where for the first time in the reporter's recollection it became necessary to remove eye glasses. To be sure, they were balanced on the fingertips for three and a half hours or more to the later surprise so much time had passed

Regardless of opinions about the story there can be no disagreement about the quality of the photography. Yes, it was Technicolor, too, and of a quality which we are coming to expect at all times. Ernest Haller, A.S.C., was director of photography, his associates being Ray Rennahan, A.S.C., and Wilfred M. Cline, A.S.C. More than three and a half hours running time means a long film, but it afforded abundant opportunities for strikingly beautiful photographic effects.

"Gone with the Wind" in many respects is a record-breaker. In one respect is this true of the number of picturegoers who have read—and reread—the book. The responses of the audience testify to this. A number of times a chuckle all over the house would follow some remark that by the unprepared would pass unnoticed.

Given the story, for better or worse, according to the great majority or the almost nonexistent minority, it is finely reproduced. Gable as Rhett Butler is the works all the way. The morals of Butler may be unconventional, but the playing of Gable is superb—and he carries sympathy aplenty.

Vivien Leigh as Scarlett O'Hara is presumably the heroine, but just why maybe a question. When for three hours and twenty minutes a woman has devoted her time and efforts, barring spectacular lapses to the heroic, to convincing an audience she is bent only on doing everything that is selfish and mean, you cannot expect any one to recreate her entire character in ten minutes. She is not the heroine. She's the heavy, a mighty good one, it may be added.

Melanie, played by Olivia De Havilland, is the heroic character—great in all feminine attributes, but lacking as many real women do in an absence of masculine strength. Leslie Howard, as the plodder who declines to fall for the fickle Scarlett, is given a great part—and plays it.

Another character that stands out in humanness—and likeability—is the proscribed Belle Watling. One of the dramatic heights of the long drama is the conversation between Melanie and Belle.

When any person sees three great pictures in three days it is to be expected the one seen Thursday will have the advantage over its successors, especially when it vividly portrays one of the great figures of all-time history. It takes precedence over the one seen Friday, because the theme of that is a phantasy, its chief characteristic being the charm of its settings and the miracles which are performed with Light and because of the latest and most mystifying means known to the cinematographer.

It takes precedence, in one man's opinion, because the one seen Saturday portrays a phase of American history which never would have been penned had not the great character seen on Thursday met an untimely death at the hands of an assassin; instead of a living Lincoln being present to "bind up the wounds" there was no one to take his place—and the carpetbagger came on.

CLIFFORD NELSON SHOWS REMARKABLE COLOR FILM

THE evening of Tuesday, January 9, was an unusual one for Clifford Nelson of San Francisco. That was the night he showed his "Sierra Nevada, Grand Crescendo of California," at Royce Hall, University of California, Los Angeles. In the first place there were 3200 feet of remarkable Kodachrome, with sound on records.

Entering the hall, some persons made inquiry to learn if their understanding was correct about the picture being on 16mm. Told it was, they looked again at the screen. It proved to be 18 feet 3 inches wide. Further, the projector was a Filmo Arc of 5000 watts and 3 inch lens. The throw looked like 200 feet or something, at least it did to one. A spokesman for the university has just informed us actually it is 118 feet. The splendid Royce Hall is said to seat 3000 persons, and surely it would seem there were at least 2000 there for the show.

The great organ was played as the hall was filling. Mr. Nelson took his place on the stage at the beginning of the show, and throughout the course of the entertainment made a running comment on the scenes revealed on the film. Fundamentally the thought behind the occasion was to show to the world what may be found in the Sierras.

Film Covers Two Visits

The film covered two visits to the mountains, one of three weeks and the other of two. In each case but two men were in the party. On that account most of the time but one person would be found on the screen, although it frequently happened there were two there. This was through a private arrangement with the camera and by agreement with the two men.

In the case of a closeup for one and then the other due care was taken in the particular position to be filled by the one being photographed. In fact, such close attention was paid by the two actors to that seemingly minor phase of the matter that it was not given thought by the audience.

There was mirth in the picturewise audience when Mr. Nelson, oblivious to the fact he had the whole audience rabidly hungry watching his companion cook a breakfast of trout and hot biscuits—much too busy doing the hungry dog act than to watch his manners—brought a hearty laugh when he explained parenthetically he was eating in a hurry because he wanted to shut off his revolving film.

In the course of the 200 miles followed by Mr. Nelson and his companion the two men traveled at all altitudes from a medium low one to the height of Mount Whitney, something over 14,500. It was a packing trip, the party being at all times on its own.

There were many scenes of high altitude, of vistas reaching for miles, some great distances above clouds. There were water falls and lakes. Much of the territory shown was above timberline. There were clouds enough to furnish a photographer's paradise, and they did. But always or nearly always there was the brilliant blue showing underneath and around, which after all really was the paradise.

No Time to Stop

On one occasion especially the clouds filled the sky, along in the afternoon. The men were in the snowbelt, and the snow began falling. They were lightly clothed, one of them garbed in shorts. The men and women in the audience may have wondered why the two travelers did not don more clothes in their fight with the apparent cold. It was not until the next day this writer learned the reason.

To stop would have meant delay, as their clothes were packed. It was 9 o'clock as it was before a camp was found.

The picture was more than just views of scenery, a travelogue. There were incidents designed to stir the wanderlust in men and women, or as the photographer phrased it, possibly after John Muir, to tease a human being to "climb the mountains and get their glad tidings."

There was variety, too, in the many intimate bits around the camp fire, of fording streams, unpacking, making camp, cooking the dinner, stowing away for the night, crawling out in the morning and getting breakfast. Other persons were met, too, on the trail. In fact, there were quite a number in the house who had met Mr. Nelson in the mountains and who came forward after the show and greeted him.

It was an unusual—even a rare—film. The house rose to it to a high degree. The fine quality was sustained for the entire 3200 feet, which for a film which has passed through but one man's hands in cutting, editing and titling, speaks for itself.

"The Road to Bali"

By LEN ROOS, F.R.P.S.

FROM Batavia to Banjoewangi is approximately 650 miles by road. This is about the total length of the island of Java, and it averages 87 miles in width. On this small island over forty million people live. The drive could be made easily in one day as the roads are good. The only obstacle is that about half of the forty million inhabitants are in front of you in the center of the road in bullock carts, horse-drawn carriages, bicycles, or on foot.

The rule of the road in Java is that one keeps to the left—in practice most people keep to the center or to the right of the road. The drive to Bali was made to secure color pictures of an elaborate cremation ceremony, which takes place annually. The ceremony this year was particularly elaborate, as the main bier was for the mother of one of the Regents of Bali.

For the trip I used my small English Ford 10. These diminutive cars are built by the Ford Motor Compay in England and are sold throughout the Far East. They are particularly handy on estates due to their narrow tread, and are very reliable and economical to operate. The car was loaded with camera equipment and one tall Dutch assistant named Koning.

Sailed to Bali

We left Batavia about 8 o'clock in the morning, had lunch in Cheribon, and spent the night at Semarang. The next day we drove through Soerakarta and straight on to Banjoewangi, where we arrived about 8:30 in the evening. Early next morning the car was loaded on a prah and sailed over to the island of Bali, where it was landed at Gilimanoek. The trip took about one hour.

From Gilimanoek to Denpasar is about 160 kilometres, the first part of which is through the jungle, where we saw a number of monkeys. Upon arrival at Danparsar we went out about 40 kilometres to the location of the ceremonies, which were to take place the next day.

The following morning we were at the location of the ceremonies at 6 o'clock and spent the entire day getting color scenes of the cremation. It is difficult to describe the varied color scheme and the elaborate biers. The colors are brilliant and contrasting, and are applied to the biers in the form of a tinsel, which glitters in the brilliant sunshine.

The temperature was about 90 degrees and the humidity about 100 per cent. We had two thermos bottles with us, which we had asked the hotel to fill with ice and orange-crush. They put one bottle of orange crush in the small thermos and ice in the large one. After we had consumed the contents of the small thermos, we merely left the top off the large one and very quickly had some ice water.

(Continued on Page 90)

Loading the Ford Ten on a prahu at Banjuwangi for a trip to Bali.

The writer and the Ford Ten on the road to Denpasar, Bali, an old Balinese temple in the background.

Balinese crowds watching the ceremonies.

Crowds collect when camera is set up on "The Road to Bali."

Color in Sourdough-Land

By Ormal I. Sprungman

16mm color frame enlargements by writer

Enlarged from 16mm color movie frame. A corner of the cabin in which the writer and his partner lived in interior Alaska fits nicely in the composition of this iceland scenic. The swinging trap helped to enliven the picture

GLOBE-TROTTING cinemillions who have never filmed under an arctic sun will find that Alaska and the Yukon provide colorful footage for peripatetic movie cameras.

Despite popular belief that the north country is all snow-splashed and glacier-covered, interior Alaska can boast of flower gardens more beautiful than any down in the States, for excessive summer sunlight and dark-less nights cause blooms to grow to huge size. Even the skies are brilliant and almost always cluttered with puffy picture clouds. Alaska, indeed, is a cine dreamland.

When my partner and I set forth on our northern jaunt it was decided that this trip would be different from others we had taken. There would be no definite plans, no previously outlined travel routine.

We'd simply sail up the Inside Passage to Seward, go inland to Fairbanks, and take advantage of every break to see as much of the northland as we possibly could.

We carried our camp clothes, sleeping bags, fishing tackle, firearms, and three cameras—the f.1.9 movie outfit, the f.4.5 Graflex, and an f.3.5 miniature, with what I thought was plenty of film stock. Unfortunately, before the 2½-month trip was up, we had run out of fodder.

Opening my film with a long shot of the steamer at the Seattle pier, I followed in turn with freight-loading views framed through warehouse doors. From a close up of the S.S. Yukon nameplate, I swung to medium shots of a deck hand shining brass, sailors climbing over the rigging, tourists crowding up the gangplank, while aboard the steamer I took several pier views of paper streamers being cast ashore, a most colorful sight for any departure.

Purplish Tinge Helps

While shooting an over-the-rail sequence, my only haze filter broke loose from its mooring and plopped into the Pacific. Too late to go ashore to purchase a new one, I was worried lest all my films be haze-soaked.

I discovered, however, that the slight purplish tinge which creeps into mountain scenes, and especially Inside Passage views, actually helps create a desirable mood and should not be filtered out for any reason.

The narrow passageway up past glaciers, hanging valleys and mountains that rise out of the sea offered wonderful filming opportunities. But to avoid overemphasis I decided to shoot only 400 feet up the Passage.

I framed my snow-dunked mountain scenics through port holes and rigging, and to give steadiness to scenes I often rested the camera on a railing or some stationary object near the center of the deck.

How "Arctic Holiday" 1200-foot Kodachrome Feature Was Filmed

Picturesque harbor shots were made occasionally in heavy downpours, for coastal Alaska has much precipitation. Ketchikan, Wrangell, Sitka, Juneau and Valdez—here the camera caught glimpses of salmon-loading, bearded old-time fishermen, native women dispatching curios, and—beneath one pier—a jelly fish fluttering about in the shallows. This jelly fish sequence, taken with the 3-inch telephoto lens, was a lucky study.

Totems Hard to Film

Deck games, such as ring-tossing and shuffleboard, were best photographed in the morning or late afternoon when the sun cast side or front lighting. Such action shots were never posed, but clicked candidly when participants were least expectant.

An excellent closeup of the captain giving orders on the bridge was obtained while I stood aside, facing the bow, and pointed the camera at right angles at the unsuspicious skipper pacing back and forth not ten feet away.

Because of their lanky structure, the color-dabbed totem poles were difficult to photograph. Long shots of the poles would lack the minute detail of the carvings, while closeups meant panoraming to show these features.

A compromise was reached, however, and rock-steady closeups of outstanding figures were mixed with a few long shots, and panorams were made only when necessary, and then very slowly.

Huge Columbia Glacier 300 feet high and running 80 miles back from the sea, is one spot few frost-fringed movie cameras ever miss. As the steamer drifts in among floating bergs and toots its whistle, big gobs of ice crack off the mighty glacial face and hit the water with a terrific roar as a tidal wave skims seaward.

To catch these glacial avalanches requires alertness but quite often a telltale trickle of shattered ice furnishes sufficient warning that an avalanche will soon follow. To avoid overexposure from the blinding glare, a small aperture must be used, and scenes are given greater depth if a ship railing or part of the rigging juts midway between ice field and camera.

Since the summer sun rarely sets in this northern climate, some striking blue-toned water scenes can be made up the Passage as late as 11 p. m., and even snapshots can be taken at midnight.

Alaska Industries

It was decided that the second 400-foot reel would be devoted to interior Alaska—the 470-mile rail trip from Seward to

Ketchikan, first port of call, has 15 feet of rainfall yearly.

FILMED IN NATURAL COLOR

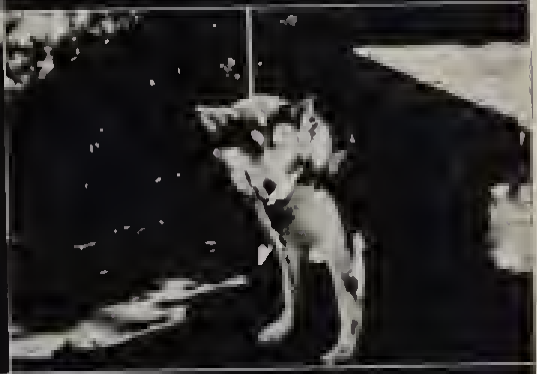
by

ORMAL I. SPAUNGMAN

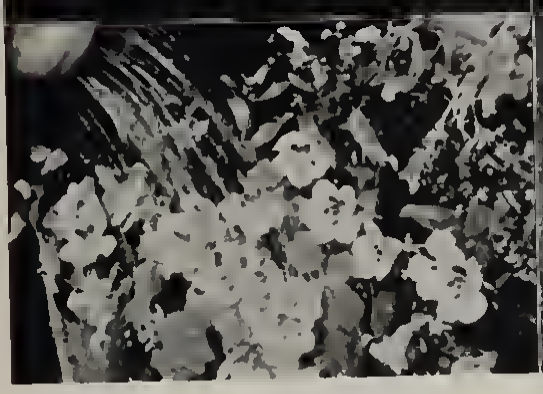
ALASKA—Land of contrasts, of great wealth and broken hopes, of snow splashed peaks and arctic gardens.

Alaska's coastline is romantic enough, yet to appreciate the north country one must travel inland.

Here sledge dogs spend summer in leisure, awaiting the call - "Mush !"



Ice - bound Alaska can boast of gardens, too.



While we fished, salmon wriggled upstream to spawn.

Fairbanks, closeups of large scale mining, winter sledge dogs spending summer in leisure, Alaska's striking home-grown flowers of big dimensions, a fishing jaunt up the Chena river in a 30-foot motor boat, our 10-day camping trip on an interior lake above timberline, including the grayling we caught and the spawning salmon we saw.

The rail sequence opened with a long shot of the Seward depot with the camera panoraming slowly to the left to the waiting train. Before the panorama started, a semi-closeup of the station sign was introduced.

Then the camera angle was changed with the locomotive front shadowing the right side of the scene against a background of hazy mountain peaks. This was followed by a moving shot of the road bed, the camera slowly lifting to reveal passing scenery. If the right-of-way were dust-free, the camera might have been inverted on this scene and the upside-down footage reversed after processing to give the impression of forward movement.

At Anchorage we hopped a puddle-jumping gas car which was making the overnight trip to Fairbanks. Sandwiched in between fresh fruits, vegetables and other perishables, we spent a sleepless night, bouncing through country where the sun forgets to set.

Bird's-eye views of Fairbanks, where we made our base, were taken from atop the weather bureau office, but closeups of malamutes and huskies were made on the outskirts of the city, since these wolfish critters are too noisy and sometimes too vicious for the townsfolk.

Husky Closeups

Here again the telephoto lens was handy for securing full facial closeups without attracting canine attention, although one dog did cock a puzzled head at the whirr of the camera motor. Backlighting and sidelighting brought out the sunny sheen of bristled hair.

We got our first glimpse of the Yukon River from the back end of a freight truck, and saw gold mining operations firsthand by riding out on a mining bus. The gold mining scenes were brief, but showed large scale hydraulicking, as practiced in Alaska today, ranging from long shots of gravel beds to medium shots of sluice boxes and dredges and closeups of nozzle men.

From among the host of flower-loving Alaskans we picked one old-time Klondiker whose front yard contained more than a hundred varieties of colorful blooms. He lived alone in a little cabin near the outskirts of Fairbanks, and closeups of his bright-eyed flowers contrasted nicely with the glaciers and snow fields filmed only a week before.

Instead of posing, the old-timer was asked to walk through his garden with my partner, pointing out beautiful flower clusters which later were close-upped. Sun-glistening dew (a sprinkling can furnished the "dew") hanging on many-hued blooms furnished good color sequences.

To provide a transition between these scenes and shots of camp life and fishing, I shifted from a closeup of domestic flowers to fireweed bordering an inland trail. Then the camera drew back for a medium shot showing the trail, flowers, and a rustic roadhouse in the background.

Salmon Battle Current

This was followed by a closer view of the roadhouse, with emphasis on the over-the-door sign reading, "Good Fishing." Finally, a grayling is shown swimming upstream through the shallows, and this introduces the fish fighting scenes which carry on the continuity.

While we tossed our flies, bloody red salmon with tattered fins battled the current to reach their spawning grounds. The most satisfactory swimming salmon shots were taken through unrippled water, free of sky glare or cloud reflections. Fluffy gobs of surface foam floating down over the struggling salmon gave the scene an artistic touch.

For ten days we camped in a dilapidated log cabin on the shores of a grayling-lousy lake, situated high above timberline and 200 miles in from the coast. Each day we would shoulder guns and cameras and hike off through shoulder-high brush in search of bear and other wildlife.

For such ridge-tramping scenes, human silhouettes against a background of billowy clouds provided good color footage. On one such trip, when we encountered several ptarmigan, I snapped on the telephoto again, sat down on an old dried-up lake bed for steadiness, and followed the tail-fluttering bird as it dodged from one hummock to another.

Several days before, I had taken a shot of a hen mallard and her flock paddling up a small stream, and this sequence was spliced in with the footage covering our boat trip up the snaky Chena river.

Squirrels of Size

Because the salmon run was small and the caribou migration late, we feared that the Alaska film would be devoid of all animal interest. However, beneath our cabin on the shores of a pretty interior lake dwelled ground squirrels of near-grizzly proportions, and these furnished the necessary human interest.

Our flights into the Arctic and east to Dawson and our river packet trip up the Yukon to its headwaters brought new filming problems. One evening, for instance, we took off at Fairbanks for an overnight stay at the little Eskimo village of Wiseman, located 100 miles north of the Arctic Circle.

This tiny city of log cabins, which claims no white women but only Eskimos and prospectors, and requires a month of travel by boat or dog team to reach, is only 90 minutes from Fairbanks via air.

Among our picturesque passenger friends were Alaska Pete, famous wrestling champion of the north country; an Indian woman en route to her tribal home; a trading post operator, whose hands and face were frightfully scarred in a fire that nearly cost his life; and my partner and I.

When we crawled out of our cheesecloth lined bunks next morning, ready for the return trip to Fairbanks, fog-dripped from every peak about us, and for three days we were grounded at Wiseman. On the fourth day, we took off down the Koyukuk, following the twisty stream hardly a few hundred feet above its surface.

Rare Shot

There was no landing field at the native mission, but this was no obstacle to our experienced pilot. A handy sand bar popped up in the river, and we sat down on that. The last hop over a cloud-hidden range north of the Yukon provided a nail-biting thrill I shall never forget.

Because of the delay, we missed our river packet, and, to make connections, we were forced to fly some 300 miles east to Dawson, the Yukon's once famous mining town. The day was ideal for air travel, with a few puffy clouds swishing past beneath the wings.

Once I looked down, and there on a cloud bank lay the shadow of our plane surrounded by a perfect rainbow of color! By quick trigger manipulation, I managed to get a movie as well as a minicam shot of the rare phenomenon, and the shadow-rainbow scene has become one of my most treasured color movie sequences.

From an aerial shot of the town of Dawson I swung to a closeup of a bulletin board announcing the packet's departure, following with a near shot of the stack of the wood-burner and the shadow of the turning stern wheel on the Yukon's milky waters.

Floating wood rafts, the wreck of the S S Casca, and the cable pull up through Five Finger Rapids offered interesting footage en route. Aptly enough—for this was the spot where I ran out of film—the reel closes with a full moon rising over the Yukon, framed through the boat rigging at f19.

John Boyle in Khyber Pass

Under date of December 8 a card has been received from John W. Boyle, A S C, in which he says:

"Now in India and having Southern California weather. I have just spent a week shooting Khyber Pass—there's always some activity there. Keep U S A. out of all wars at least until I get home next spring. Kindest regards to all the gang."

Mr. Boyle may be reached prior to April 1 at the office of Thomas Cook Sons, Bombay.

*PLUS X

*EASTMAN

J. E. BRULATOUR, INC.

BOOKS

Edison's Invention of the Kineto-Phonograph. By Antonia and W. K. L. Dickson. With an introduction by Charles G. Clarke, A.S.C. Being a reprint of an article originally appearing in the Century Magazine in 1894. Privately printed by Mr. Clarke at the Pueblo Press, Los Angeles. $4. 1939. 250 numbered copies.

Mr. Clarke begins at the beginning of motion pictures in the telling of this story of Thomas A. Edison and his work for the screen. He goes so far into history, in fact, he reprints or reproduces a copy of the Zoetrope, as it was when first made in 1833.

He recites the efforts of Governor Leland Stanford of California to secure evidence that at times a horse has all four hoofs off the ground at the same time—how he did it at a cost of nine years' time and $40,000—and how he made a great start toward motion pictures.

As Mr. Clarke points out, it was Edison's first conception of the motion picture that it be an accompaniment of the phonograph. It was in 1876 that he invented the phonograph, some eighteen years prior to his Kineto-Phonograph.

It was late in 1899 that Edison, returning from Europe, was ushered into a room in his works and introduced to a moving—and speaking—figure on the wall. It was the man who uttered the words he heard who writes the brief on Edison's invention of the Kineto-Phonograph.

It should be borne in mind the story was written in 1894—forty-six years ago, when things were primitive. Nevertheless, the tale sets forth the many expedients tried and abandoned; others tried in their place and some found to be successful.

A part of the final sentence, written in 1894, will show the fullness of the prophecy in which the Dicksons indulged:

"Not only our own resources but those of the entire world will be at our command. The advantages to students and historians will be immeasurable. Instead of dry and misleading accounts, tinged with the exaggerations of the chroniclers' minds, our archives will be enriched by the vitalized pictures of great national scenes, instinct with all the glowing personalities which characterize them."

U. S. Camera Annual 1940. Edited by T. J. Maloney. Random House, Incorporated, New York. 1939. Photography selection, Edward Steichen. 276 pp. Over two hundred photographers represented, sixteen in color. $2.95.

Here is a book rich in contents. It is announced there will be but one printing and that there is a limited edition of 30,000 copies. Looking at the book, that number does not sound so big. The book has been given a permanent, handsome binding, easily the best presentation the Annual has had.

It was a one-man selection, by Edward Steichen. Fifteen thousand pictures were submitted, of which 5000 were handed to Steichen. He went beyond that and examined a thousand which had been withheld, to satisfy himself that due care was being exercised, that none were being eliminated that he also would not have participated in.

The real problem, of course, came when he reduced 5000 to 500. Of these 100 became "musts." An additional 200 were selected, and the final choice among these rested with the editor in meeting the problems of layout.

Anticipating the story of the publication of the result of Edward Weston's awarding of a Guggenheim Fellowship last year are twenty-four pages devoted to a preliminary showing of some of his work in California. In the section are twenty-three pictures by the photographer, accompanied by text written by Charis Wilson Weston, his wife. It is all of deep interest to every lover of photography.

The contributors to the color section are Valentine Sarra, Lejaren Hiller, Ruzzie Green, Louise Dahl-Wolfe, Anton Bruehl, Ruth Nichols, Tony Frissell, Edward Steichen, Paul Outerbridge, Victor Keppler, Hoyningen-Huene, Leslie Gill, Ivan Dmitri, Nickolas Muray, Arthur Gerlach, Charles Kerlee and others.

There is in chronological order a description of what has taken place in the photographic world in the past 100 years. It occupies eight spacious pages. An index at the close of the book describes not only each picture and its factors but the background of the photographer.

Pictorial Composition in Photography. By Arthur Hammond, F.R.P.S., Associate Editor of American Photography. Third edition, revised and enlarged. 1939. American Photographic Publishing Company, Boston. 48 illustrations and 153 pp. $3.50.

Opening this book at random the eye lights upon a sentence that will stand rereading. "There is much to learn in making pictures," it says. "Only a little can be gathered from books. The greater part of the knowledge must consist of actual experience."

We will go back to the beginning of that paragraph. "It must be understood that in picturemaking," we read, "the methods used by one photographer may be entirely unsuited to another. This must be so, or there would be little or no individuality in pictures by different artists. The principles referred to in this book are merely some of the fundamentals, and each artist must develop his own individuality, while still adhering more or less closely to these basic principles.

"I have endeavored to make clear to those interested in the artistic side of photography how the mechanics of suggestion can be applied in picturemaking.

(Continued on Page 90)

Don Ameche and Andrea Leeds in Twentieth Century-Fox's "Swanee River," illustrating the low key lighting which Cinematographer Bert Glennon employed in photographing the story.

Story Should Always Come First

By BERT GLENNON, A.S.C.

Cinematographer Glennon (right) critically studies his meter as Don Ameche awaits the word for a scene in Twentieth Century-Fox's "Swanee River"

(Famous Twentieth Century-Fox Cinematographer who has handled the filming of some of the greatest pictures to come out of Hollywood, among them "Hurricane," "Stageconch," "Young Mr. Lincoln," "Drums Along the Mohawk," and his last, "Swanee River.")

FOR a long time I wanted to work in color. That, no doubt, is the desire of every progressive motion picture photographer because color affords such an opportunity to fully express the moods that are so vital in true story telling.

Black and white photography restricts both photographer and director to the ability of the audience to supply mentally the color that is absent from the screen. For instance, the audience sees the American flag in black and white. Automatically, it visualizes the flag in red, white and blue.

However, the fact that we are compelled to depend on the audience itself to supply the missing element is a handicap, for no two people react exactly in the same manner.

That, it strikes me, accounts in large part for the enthusiasm among audiences for pictures in color. True, some of these pictures are not carefully photographed, but the audience gladly overlooks many of the defects because a missing component of expression has been supplied.

That component of color—added to lighting, composition, and angle of view,—gives the author, director and photographer a complete set of tools with which to create a perfect background.

And the story, I might add, is the important element of the motion picture, a fact which is not forgotten even during the set-up of the most simple scene.

Color Adds to Beauty

Until the perfection of color for the screen, the photographer had to depict the background with light, shadow and composition striving to create a synthetic mood in monochrome and relying on the audience's black and white education to supply the feeling of color.

Now color enters our experience to enhance all the other elements, simplify the photographic approach and obtain all the fine textures and shadings impossible in black and white.

In short, we add to the beauty. We get painted images which the observer can carry home with him in his mind. Now, even a gaunt draft horse with protruding ribs looks beautiful because of the poignancy which color adds.

My assignment to photograph "Drums Along the Mohawk" gave me an opportunity to put to the test certain ideas which I had long entertained. Theatre patrons can thank Darryl F. Zanuck for the photographic beauty of Twentieth Century-Fox pictures because he refuses to compromise with quality. His view, which I have often heard him express, is this:

"On the Screen"

"I'm not interested in the trouble you had getting the scene. All I know and believe is what I see on the screen."

That makes for persistence and perfection as far as it is possible to attain perfection. I approached "Drums Along the Mohawk" with certain reservations. It won Mr. Zanuck's approval.

It also won the monthly critics' award for photography. The credit goes equally to Mr. Zanuck for the confidence which he placed in me and to John Ford, the director, whose knowledge of photography made possible the fine effects in the picture.

Then followed "Swanee River," another opportunity—an opportunity to submerge the camera for one of the best screen stories it has been my pleasure to film.

If, in "Drums Along the Mohawk," we had used color with a free hand, we had a totally different problem here. The story was a simple, tragic and moving tale. Yet it was laid in a colorful period.

Costumes in those days ran the gamut of the rainbow. But to have given emphasis to the color would have meant obtruding on the story itself. The eye would have been taken, but some of the emotion which the tale contained would have been lost.

We decided on a rather revolutionary treatment. We decided to use no more light in filming "Swanee River" than is used in plain black and white. Ordinarily, five times as much light is used in color pictures than in monochromes.

Days of Doubt

I had misgivings, naturally, and the rushes that I saw from day to day didn't quite dispel my feeling of doubt. There was nothing spectacular either in the set up or the color in those daily rushes.

The effects which we had obtained in "Drums" still seemed to predominate in the minds of those at the studio. Comparisons, mostly critical, began to come.

Mr. Zanuck himself began asking questions, and about that time I began to wonder if my whole conception of the picture was out of focus. I was compelled to gamble the confidence of almost everyone concerned against the final outcome.

I was convinced that the story would emerge with all its appeal undiminished and that any spectacular treatment photographically would only confuse those who saw the picture.

My co-workers were good enough to let me have my way. I had the feeling that the work was good enough for acceptance and not bad enough to warrant the expense of retakes.

In short, I hoped that the photographic treatment I had given "Swanee River" would enhance the melodies and the human portrayals and still not make the public camera conscious.

I might have been wrong, of course, but fortunately I wasn't. "Swanee River" has enjoyed more favorable comment for its photography than did "Drums Along the Mohawk." Which proves to my mind once more that the story should always come first.

STUDYING PHOTOELECTRIC EXPOSURE METERING

By CAPTAIN DON NORWOOD, U.S.A., Retired.

Part III

PHOTOELECTRIC exposure meters of the reflected illumination type have been responsible for a marked advance in photographic practise. They have offered a convenient means of quickly determining approximate exposure.

However, in our study of the action of this type of meter it has become apparent that an indication of approximate exposure is the most that can be expected. Certain principles underlying their operation act to introduce certain errors in many cases so that a precise indication of ideal exposure for a given scene must not be expected.

The most recent advances in this type of meter, such as narrowing of acceptance angle, increased sensitivity, and better mechanical construction while good, have not served to eliminate errors inherent in principle of operation.

Check with Laboratory

Let any cinematographer who is completely satisfied with his negative exposures check up with the laboratory and note what printer settings are required to print from his negatives. If all his negatives can be printed from one printer setting near to the center of the printer scale, his satisfaction is justified.

On the other hand, a wide variety of printer settings and any considerable departure from the center of the scale may be taken as reliable indicators of the amount of room available for improvement in this regard.

With the rising demand for black and white negatives that are of such high quality that they can be printed with a constant printer setting, and the requirement of natural color films for consistently ideal exposures for every scene, it appears that there is considerable need for a type of meter working on principles which do not allow the introduction of errors of any considerable magnitude.

The latter part of Part II of this series led us directly to a consideration of a photoelectric exposure meter which measures Incident Illumination.

Exposure Determination

Since there is some controversy over the relative merits of incident light measurement vs reflected light measurement, for determination of exposure, it might be of some interest briefly to scan the field of devices used for the purpose. Let us note to which group each of these devices basically belongs.

The actinometer. This was one of the earliest types of exposure meters. Examples of this type of meter are the Watkins, the Wynne, the Imperial, Photometer M. and V, Haka-Expometer, Metropose Michant, Steadman and Beck.

The principle of operation is that of exposing a small segment of sensitized paper to incident light. The length of time necessary for the segment of paper to darken to a predetermined shade indicated the strength of illumination.

From tables the proper exposure controls could then be determined. The device worked quite well. It will be noted that this device functioned by measurement of incident illumination.

Exposure Tables

Exposure Tables. Examples of these are the Burroughs-Wellcome, various Photographic Almanacs. They take into account such factors as time of year, time of day, condition of sky, etc., are actually an indication of what strength of illumination may be expected from the sun under the given conditions.

This in effect amounts to an evaluation of incident illumination. Some of these tables have been in use for decades, and although not very convenient to use, will give a good approximation to the correct exposure.

Booklet "How to Expose Kodachrome." Issued by the Eastman Kodak Company for the guidance of users of Kodachrome film. The tables and charts in this booklet work on the principle of an evaluation of incident illumination under given conditions.

Tables issued by the General Electric Mazda for the determination of exposure under photoflood lights. Here the size of the lights and the distances from lights to subject are the factors involved. These tables are based on a determination of the value of incident illumination on the subject.

"Lights and shadows on the subject find their counterpart on the pick-up surface of the meter."—Photographer when taking reading is in position of subject

It can be seen that there is a good deal of precedent for the evaluation of incident illumination in determining photographic exposure control values. The principle is fundamentally sound

Photoelectric Cell Meter

If a photoelectric cell meter could be properly adapted to this use it would present distinct advantages in the way of accuracy, speed of operation, convenience and extended utility. The characteristics of such a meter appear to be worthy of some study.

A very natural question confronts us. How can a measurement of the incident light serve as a guide to exposure when a scene may have in it bright or dark areas, or objects, covering quite an extended range of brightness?

The first part of the answer to this question lies in the definition of brightness. The brightness of any object in a scene is a product of the incident illumination and the reflection factor of the object. The incident illumination is what we propose to measure.

We are next concerned with the range of reflection factors liable to be encountered. Will the negative film have a latitude broad enough to take care of the range of reflection factors encountered? If so, then the problem is solved.

Examine Range

Let us examine this range of reflection factors to see just how broad it is in practice. Theoretically it may range from 0 percent to 100 percent. Practically we find that objects having a reflectance of 0 percent to 4 percent are called black. Also it is usually found that the portions of a scene falling in this range are of least significance to the picture.

What do we find at the other end of the scale? Very few objects having a diffuse reflection factor of over 90 percent will ever be encountered.

The practical range required then is from, say 2 percent to about 90 percent, a range of 1-45. This is very easily included in the film latitude of 1-128, if properly centered.

Also there will be plenty of spare room left at each end of the film latitude to take care of the exceptional cases where an unusually long scale of brightnesses are encountered.

The measurement of the incident illumination serves to indicate exposure controls which will accomplish the centering of the brightness range on the film latitude. This is exactly the condition desired for the production of the ideal exposure.

Several benefits result from this method.

First: Incident illumination is tremendously stronger than reflected illumination. A meter made to measure it may be made more compact, more rugged, and more accurate than the delicate meter required to measure reflected illumination. The feature of accuracy at low levels of illumination becomes of increasing importance as faster film emulsions become available.

Confusing Effect

Second: The confusing effect on a reflection type meter of variations in the relative proportions of light and dark areas in a scene is entirely eliminated with this direct acting type of meter. (This phase of the matter was covered in detail in Part II, of this series.)

Third: Errors due to color in a scene are eliminated. The response to different colors in the spectrum is quite different for a photoelectric cell and a photographic emulsion.

Thus if a scene were preponderantly one color the light reflected from it would be of that color. Light of said color might have more, or less, effect on the photographic emulsion than it had on the photoelectric cell.

It will be appreciated that wide variations in color of reflected light may be encountered. Thus the indicated exposures from a meter measuring reflected illumination may be thrown considerably off from the correct value by chromatic error.

While there also will be found some variation in chromatic composition of incident illumination, this variation is, by comparison, small. Furthermore, incident illumination will usually contain a known balance of the visible colors, so that correction is easy to make. So by the measurement of incident illumination the chromatic error may be practically eliminated.

Fourth: The reflected illumination type of meter is subject to one particularly bad hazard when used in the studio. The light from a back-lighting unit may strike its sensitive cell. This will cause an entirely erroneous reading that will result in a considerable underexposure of the subject. The incident illumination type of meter is entirely free from this hazard.

[To Be Concluded]

"The meter is pointed at the camera from the subject's position, where it integrates and evaluates all illumination photographically effective on the subject."

In attendance, left to right, around the Twentieth Century Camera: Lucien Andriot, A.S.C., Dan Clark, A.S.C., Pamela Randall, Roger Sherman and Eddie Fitzgerald. The set was lighted with four Dinky-Inkies and a Keglite.

DAN CLARK DISCUSSES CAMERAS AND LIGHTS

HERE is a photograph of the new Twentieth Century Camera. Much has been said about it, but outside of the studio where it has been in operation nothing much has been seen of it. Dan Clark, A.S.C., former president of the A.S.C., and head of the Twentieth Century Fox camera department, who in the picture holds the meter on Pamela Randall, talked enthusiastically of the instrument one morning at the end of the last month.

One of these cameras has been in operation, he said, at the Twentieth Century-Fox studio for four years and another for two years. By March 1 the Wall Machine Company of Schenectady, N. Y., will begin the delivery of the third.

Nine more already are ordered, and they will arrive steadily until the ten are completed, which is expected to be early in the Fall. The Wall Company then will be ready to start work on orders for the open market.

"The camera is working very successfully," declared Mr. Clark when asked about the camera. "The Fox men all swear by it. The Twentieth Century is bringing down the weight of camera equipment from 600 to 98 pounds. As a matter of fact, the Twentieth Century camera will be only 20 pounds heavier than cameras were in the days of the silent era.

"It does not require a blimp of any kind nor do we have to shoot through glass. We just use an ordinary lens, the usual lens, with the result of making a big difference in photography."

There was a moment's discussion of "The Blue Bird," product of the Twentieth Century Fox Studio. The writer emphasized the heights of photography attained in the making of the picture and of the miraculous nature of the technicians' work all the way.

"Yes," agreed Mr. Clark, "it is too bad it could not have been released a little sooner, in time to come into the reach of the year 1939. I think it is agreed by a great many it would have been a strong contender for any special award that might have been floating around. Artie Miller did himself proud by his work in the making of that picture. Many believe it was a great deal of a trick job. They are in error. It was a lighting problem all the time."

The talk turned on the strong tendency to follow the path of the streamlined train, to make for speed and lightness, to create for real efficiency, the camera being a striking instance.

"As weight and bulk of the camera are going down so also are the supple-

(Continued on Page 93)

New Gadget Coordinates Meter, Makeup, Lighting

By Joseph Walker, A. S. C.

Joseph Walker, A.S.C. shows method of using his comparator. The rheostat at his right hand controls intensity of internal globe illuminating make-up standard, switch at right turns light on and off. The meter's dial is visible through window on top, while knob nearby rotates the four make-up standards into position. Still by Irving Lippman.

As a rule, when a cinematographer develops a new gadget to aid his work, the device itself evolves first; its application last. In other words, it is usually a case of getting an idea for a piece of equipment first, and then figuring out some way to put it to work simplifying some of the problems of production.

Only on rather rare occasions does the use present itself first, and forcibly demand the development of some piece of equipment for solving a specific problem.

During the past year I have felt a need existed for some device which would simplify the cinematographer's daily problem of coordinating illumination levels with the tonal values of his subject, most particularly, of course, the face tones of his principal players. Modern photoelectric light meters, even though they represent a noteworthy forward stride in technique, do not do this.

Uneven Subject Tones

With a meter it is of course possible to maintain consistent illumination levels. If, for instance, you find that for normal effects you get the best results with a key-light level of 80 foot-candles, the intelligent use of a meter makes it simple to maintain that value consistently through any number of scenes, made over any period of time. But it fails to take into account variations in the tonal value of the subject. And with the extreme sensitivity of today's emulsions, even slight variations in illumination levels and tonal values, so small that a few years ago they were negligible, are today important factors.

In studio cinematography, the key value of any scene is generally the face of the star or some principal player. Lighting, exposure and processing are all coordinated to keep that face tone at a pleasing, normal rendition. Make-up, too, is a vital part of this claim. Theoretically, the make-up should keep the actual face tone consistent, while the use of the light meter should keep the illumination level consistent. This, with the uniform processing of modern laboratories, should keep the facial rendition on the screen consistently normal and pleasing.

But with the extreme sensitivity of modern emulsions, this is not always the fact in actual practice. Minor variations in the actual tonal value of face and make-up—often too small to be easily detected by purely visual inspection—can and do produce embarrassing variations in the photographic rendition of those facial values.

Perhaps the most common variation is the all-but-imperceptible change during several scenes—or even several takes of the same scene—that come as the make-up is retouched and "powdered up." That retouching is of course necessary to maintain the desired textural smoothness. But each time it is likely to lighten the tonal value of the face slightly.

The alteration is unintentional, it is true, and usually so slight as to escape detection when you glance at the retouched make-up as a whole. But the film sees it.

Inevitably, too, the effect is cumulative by the end of the day's work the tone of the make-up may be several shades lighter than it was at the start. And how it can show up in the rushes!

Balance Light to Make-up

This variation can be easily compensated—if it is seen. A slight reduction or increase in key-light level will do it. But the problem is to detect and measure it.

As I considered the problem, it became increasingly obvious that if the visual tonal value of the make-up could be compared, visually, to a known, constant standard, with the actual make-up illuminated by the set lighting, and the comparison-standard illuminated by a known standard illumination, variations in the tonal value of the make-up could quickly be detected, and compensation made by raising or lowering the key-light level.

To this end, I developed a simple comparator which has proved its worth during the production of several recent pictures, including "Only Angels Have Wings" and "Mr. Smith Goes To Washington."

The device consists of a small, wooden box which houses a standard General Electric light meter, a variable light source and a surface which may be treated with the desired make-up.

This latter is a four-sided shaft, about a quarter of an inch square, made of dural. Each of the four faces may be treated with a different shade of make-up—one bearing the leading woman's make-up, a second the leading man's, and so on. If desired, one face may be painted to match the set walls.

Visual Comparison

An optical system composed of a negative lens and a positive eye-piece permits one to look through the comparator at the scene, as in a simple finder. A small, positive mirror reflects the make-up sample into the center of this viewing field, with a sharp-edged blend.

Thus it is possible to study the actual make-up through the comparator, with the standard make-up brought directly beside the player's face for easy comparison.

The make-up standard is illuminated by a small, frosted 10-watt globe pow-

ered from any convenient source of current—either D C or A. C. may of course be used.

The light from this globe falls on the photoelectric cell of the light meter. By means of a small rheostat built into the case, the strength of this light is adjusted to produce a predetermined standard reading on the meter's dial, which is visible through an opening in the top of the case. This effectively standardizes the illumination on the make up standard, eliminating inaccuracies which might otherwise be caused by fluctuations in line voltage, by deterioration of the light globe and so on.

This standard reading is determined during the pre-production make-up tests of that particular player. It is balanced to the standards of make-up and set illumination which have been found to give the most desirable facial rendition for that player.

Measuring Make-up Changes

In use, after the set has been lit, and the conventional illumination readings made with the ordinary meter in the usual way, variations in make-up tone can be checked by quick inspection through the comparator.

Obviously, the make-up standard and the actual make-up, as seen through the comparator, with make-up, set lighting and comparator illumination at normal standards, should match perfectly. If they do not—if the actual make-up seems too light or too dark in comparison to the standard, either the make-up or the lighting has obviously varied.

Compensating for this variation is achieved simply by manipulating the intensity of the key lighting in any convenient way—by flooding or concentrating the key-light, by altering diffusion, or by the use of individual dimmers, as one may prefer.

It should, I believe, be as useful in color cinematography as in black-and-white.

It will be clear, I hope, that this comparator is not in any way intended to replace conventional light meters and their use. It is intended to supplement them and to afford a quick and easy means of detecting and correcting the tonal variations which conventional meters are not capable of measuring. In that use, my own experience has proved it a useful aid to cinematography.

HALLER, RENNAHAN, CLINE

THE photographic award by the correspondents of Hollywood in the Reporter for December was given to Ernest Haller, A S C.; Ray Rennahan, A S C, and Wilfrid M. Cline, A S C. The picture was "Gone with the Wind." The correspondents must have been under the spell the photography created, because every honor but that for the best original song and best general feature went to the Selznick International subject.

This is the second award won by Ernest Haller, he having taken the opening picture in the poll, that for "Jezebel," given in March, 1938. It was the third given to Ray Rennahan, his preceding mentions having been with Ernie Palmer, A S C., in the making of "Kentucky" and with Bert Glennon, A S.C., in "Drums Along the Mohawk."

The Reporter cited some of the pictures that had created what would have been unusually strong competition against "Gone with the Wind." There were such pictures as "Of Mice and Men," "Balalaika," "The Earl of Chicago," "Gulliver's Travels," "Hunchback of Notre Dame," "Judge Hardy and Son," "The Light that Failed" and "Swanee River."

The winner of second photographic honors was Bert Glennon with "Swanee River." Glennon has taken the first award in his three consecutive preceding pictures—"Stage Coach," "Young Mr. Lincoln" and the third, a Technicolor in which Ray Rennahan shared, "Drums Along the Mohawk."

Third place in the poll for December was won by Norbert Brodine, A S.C., who photographed "Of Mice and Men."

Academy's Sound Committee Sets Candidate Productions

John Aalberg, chairman of the sound recording award committee, announces the following nominations for the Academy award for achievement in sound recording:

"Balalaika," Metro-Goldwyn-Mayer; "Daytime Wife," Twentieth Century-Fox; "Gone with the Wind," Samuel Goldwyn; "The Great Victor Herbert," Paramount; "The Hunchback of Notre Dame," RKO Radio, "Man of Conquest," Republic; "Mr. Smith Goes to Washington," Columbia, "Of Mice and Men," Hal Roach; "Private Lives of Elizabeth and Essex," Warner Brothers, "When Tomorrow Comes," Universal.

The rules governing the sound recording award specify that the members of the sound recording award committee must view all of the nominated productions under the same viewing conditions, in order to be qualified to participate in the final voting to select the one production to receive the Award.

Under the schedule set up by the committee, the final meeting for the purpose of viewing these excerpts and for subsequent voting will be held on Tuesday evening, February 26.

Interior arrangement of Walker's comparator. Ten-watt globe (left) controlled by rheostat (partly concealed by rear partition) illuminates four-sided shaft (right), to which make-up standard is applied. This illumination is measured by General Electric exposure meter seen at far end of box. A small positive mirror attached to the front window reflects the image of the make-up standard into the center of the field covered by the viewfinder system, seen below and behind the meter.

PENETRATION

The tremendous penetrating power of the carbon arc is well demonstrated by the famous air beacon at Chicago. Pilots are able to see the beam from the single carbon arc in this huge searchlight at a distance of more than one hundred miles.

This penetrating quality of carbon arc illumination adapts it to the lighting requirements of large studio sets. The color quality, closely resembling daylight, is a further advantage for color productions or where there is need to blend artificial lighting with daylight.

Hoblitch Blessing Studio

USE NATIONAL TRADE MARK MOTION PICTURE STUDIO AND HIGH INTENSITY CARBONS

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Part of the throng in front of the cathedral during taking of 1939 RKO-Radio's "Hunchback"

One of the subsidiary sets employed on the 1939 production of "Hunchback"

Startling Electrical Comparisons in 'Hunchback' 1923 and 1939

By EARL MILLER

Chief Electrical Engineer RKO-Radio Pictures

Earl Miller, gaffer on Universal's production of "The Hunchback of Notre Dame" in 1922-23, now chief electrical engineer of RKO-Radio Pictures and as such in charge of the electrical equipment on the 1939 production of the same picture. Photo by Ernest Bachrach

YOUR memory of what happened seventeen years ago may be dim and unreliable, but photographs and records have a way of remaining unchanged. You speak and think of the improvements which have taken place in motion picture technique since 1923, but seldom do you actually sit down and compare today's procedure with that of the early twenties.

The RKO production, "The Hunchback of Notre Dame," starring Charles Laughton, which was filmed in 1939 and has just been released, brought back many memories to those of us who had worked at Universal City in the old days.

Nearly seventeen years ago, Universal Pictures made "The Hunchback of Notre Dame" with Lon Chaney in the title role. As "gaffer" of the 1922-23 production, my memory of that period on some points is very clear.

Actual shooting started December 16, 1922, and what a winter that was; rain, fog, wind and mud—days, weeks, months of it. "The largest artificially lighted motion picture set in the world," they told us.

Believe me, when I recall those foggy cold nights and the miles we walked, night after night, up and down that cobblestone street and out in the mud, I wonder how the picture was ever completed.

No Inkies in 1923

In 1923, incandescent lights were not used for motion pictures. The street set was a few feet longer and wider than the one used in the 1939 production. There were only fifty six 24-inch sun arcs in the entire industry in Hollywood.

We needed every one for our night shots, and Universal arranged to rent all but one. Every night for seven long weeks all the sets in other studios were stripped of 24-inch sun arcs. They were loaded on trucks and hauled to Universal.

We used them until 5 A.M., but had to return them to the proper studio and have them set and ready to burn by 8 A.M.

Whenever possible, we left the lights on the trucks all night instead of building parallels. This accounts for the number of trucks showing in the panoramic picture accompanying this story.

Every light used in the 1923 production was an arc. Some of the 24-inch had automatic feed, but in addition to these there were more than 450 other arcs, all of which were hand fed. All lights had to be trimmed at least twice every night and some three times.

Yes, we actually shot every night, all night, for forty-nine straight nights. At one time (and it would be the time it rained the hardest) my crew and I worked five days and six nights straight, rigged all day and shot all night; never took our shoes off, cat napped between shots.

Six Months' Work

Finally on June 3, 1923, the last reel was in the can, and in spite of all the work and worry everyone who worked on or in that picture will tell you that we had lots of fun making it.

Here are a few of the electric statistics:

8 portable generators (every one we could buy or rent)
2 300-K.W. stationary generators
6 150-K.W. transformers

The peak load was approximately 37,500 amperes.

Now let us take a look at the RKO 1939 production from the electrical standpoint.

First, let me pay a deserved tribute to Joe August, A.S.C., the cameraman who, after all, is the man responsible for the superb lighting effects achieved in this production. Joe knows his lights and where he wants them. His thoroughness, untiring patience, and knowledge of lighting problems made the work of our department a real pleasure.

16 Years' Difference

You will note that in 1939 only 29 arc lights were used; of the balance, more than one hundred were the new T-5 converted type, 24-inch sun spots.

In addition to the lights mentioned

herein, every window and doorway (110 in all) was lighted by a 1000 and 2000 watt studio-made reflector These lights were all wired to a central control board in each set

In close-up work, we also used 150 2000 watt type 14s and 30 500 watt Baby Kegs.

In the electrical department records we find these interesting facts and figures:

It required 75,000 watts in small globes (25 to 500 watts each) to illuminate dressing room and dining room tents and back stage

We built 3200 feet of special high tension power line, carrying 2500 volts 3 phase.

Approximately 35,000 feet of feeder cable were used.

45,000 feet of No 14 lamp cord

12 remote control boards

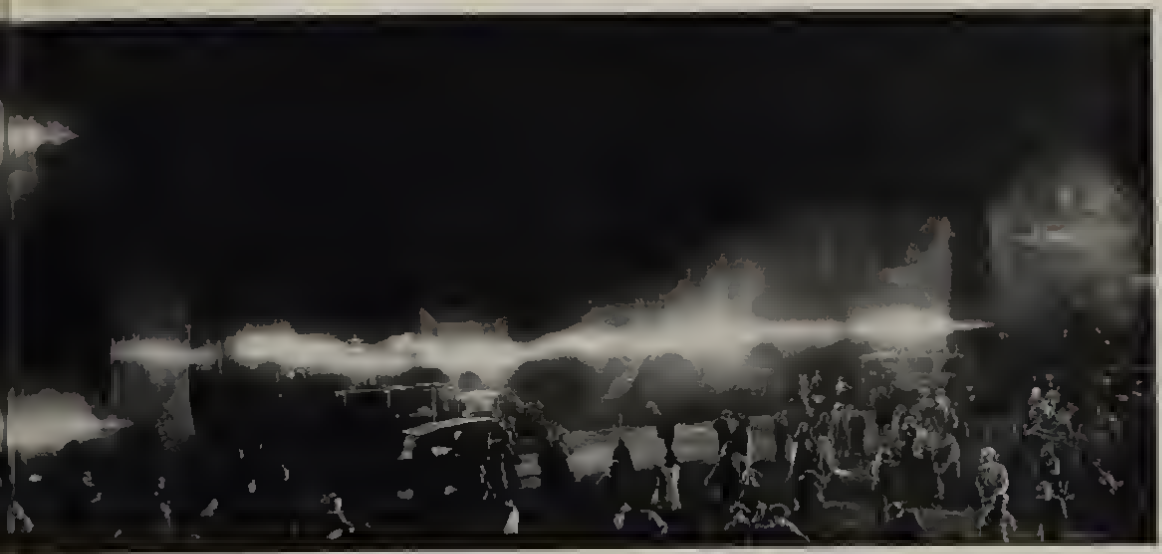
3 manual boards.

All of this seems like a great amount of equipment, and it was, but here is the great difference. The peak load for this entire set was 11,500 amperes or about one-third of the peak load of the 1923 production 37,500.

While the 1939 street set was probably the largest attempted in recent years, it was just another production in our department To be sure, we had perfect weather every day

We started shooting on July 10, 1939, and completed work on Oct. 2, 1939 There was hardly a hitch from start to finish. Every man in our department did a swell job and I am proud of every one

Remembering all the trials and hard work of the 1923 production, I naturally did a little advance worrying when the 1939 "Hunchback of Notre Dame" was scheduled But, like most of the troubles we worry about, they never happened



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C. Roy Hunter Talks of Other Days

CUSTOMS in the taking of pictures change in the course of sixteen odd years. The total footage of negative exposed on the recent making of "The Hunchback" was 228,290. That was exclusive of the positive film employed in the music scoring, a matter of 148,365. Where on the 1923 production at Universal 165 days were employed in the making of the production, only 72 were devoted in 1939.

Going back to 1923 C. Roy Hunter, now head of the Paramount Camera Department, in those earlier days was at the head of both the laboratory and the camera department of Universal. His recollection of the negative film exposed was 750,000 feet. Where on RKO-Radio's camera work on the picture not more than seven cameras were used at one time, in the making of the Universal production there was one day when the cameras totaled twenty-six. They were grouped in thirteen pairs.

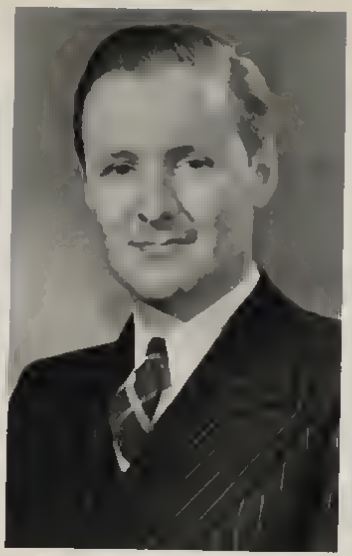
The occasion was the engagement of 2500 extras. Unknown to these extras they were to be attacked by 500 horsemen in tin armor and driven on to the steps of the cathedral. The plan was to create a panic. The plan succeeded—in full.

Every precaution was taken to avoid accidents. First aid stations were established at convenient points, while surgeons and nurses were allotted. The 500 horsemen precipitated a most realistic mob scene when the word was given for them to move in. Terror and pandemonium reigned, speaking truthfully.

But the precautions that had been taken worked to a charm. Almost. Of all the close calls and narrow escapes from injury only one required the at-

(Continued on Page 86)

Philip Hooker, manager of the Dealer Service Division of Bell & Howell, Chicago



Carl Schreyer, new Bell & Howell representative in South

J. Lawrence Goodnow, manager of the Personal Equipment Division of Bell & Howell, Chicago

BELL & HOWELL PROMOTES THREE

The Bell & Howell Company has named three of its younger employees to positions of greater responsibility—Philip Hooker, J. Lawrence Goodnow and Carl Schrever. Mr. Hooker has been appointed manager of the dealer service division of the Bell & Howell Company, Chicago. A graduate of Northwestern University, Mr. Hooker joined the staff of the Bell & Howell Company six years ago, leaving the Packard Motor Car Company to enter the motion picture equipment field. He served as the B&H district manager for Pennsylvania for two years and subsequently returned to the main office to handle dealer activities in the Chicago area.

O. N. Wilton, assistant sales manager, continues in charge of all Bell & Howell export business, and, with J. H. Booth, general sales manager, as general supervisor of all B&H sales activities and dealer relations.

Mr. Goodnow has been appointed manager of the personal equipment division of the Bell & Howell Company, Chicago. After graduating from the University of Chicago, Mr. Goodnow accepted special military duty, serving as lieutenant of field artillery at Fort Sill, Oklahoma. Leaving the army for civilian life, Mr. Goodnow joined Bell & Howell two years ago as assistant manager of the personal equipment division.

Leaving the Chicago office to become Bell & Howell's district manager for the southeastern part of the United States, Mr. Schreyer takes to the road with a wealth of experience. During his five years with the Bell & Howell Company Mr. Schrever has been successively in the industrial and educational divisions, the B&H New York branch office, and the personal equipment division, of which he was manager at the time of his new appointment.

Agfa Ansco Stockholders Merge with General Aniline

December 28 last the stockholders of Agfa Ansco Corporation approved the merger of Agfa into the General Aniline and Film Corporation, which latter company for some time past has owned a majority of the outstanding stock of Agfa Ansco Corporation. The directors of Agfa Ansco Corporation recommended this merger in the interest of simplifying the corporate structure and effecting various economies in the operation of the business as a whole. The continuing corporation's other major industry outside of photographic materials is the manufacture of a large variety of dyestuffs.

The business of Agfa Ansco Corporation will be conducted under the same management and under the name of Agfa Ansco division of General Aniline and Film Corporation.

It must be considered as a great advantage for the growing business of the Agfa Ansco Division that the continuing corporation will be in a position to furnish additional capital if such should become necessary as it has a working capital in excess of forty million dollars.

Southern Cinema Club

The Southern Cinema Club was organized in January, 1939, by P. M. Niersbach, president, Henry Huddleston, vice president; Miss Doris Lee, secretary, and Miss Louise Arbogast, treasurer.

The club is for 8mm and 16mm enthusiasts of the southeast Los Angeles district. Our meetings are held the fourth Tuesday of each month in the Lynwood City Hall. At each session we have a speaker or give a demonstration on some phase of moviemaking and pictures are shown.

We have a technical committee which gives advice and a social committee which has charge of our social events. During the year we had two social affairs, an outing at Forest Home and a fishfry at Santa Monica.

We have thirty-five members. Dues are $1 a year, and membership in the club is still open.

On January 23 we installed our new officers, who are as follows: A. B. Callow, president; J. O. Law, vice president; Don Hunt, secretary, Vernon Larson, treasurer.

DORIS LEE, Secretary.

WORLD-WIDE SUPREMACY

NINE out of the Ten Best Pictures chosen in the *Film Daily*'s 1939 critics' poll were made on Eastman Negative Films. Two of the Ten Best Pictures were made in England, and both were on Eastman—striking evidence of the world-wide recognition of this film's excellence. Eastman Kodak Company, Rochester, N. Y. (J. E. Brulatour, Inc., Distributors, Fort Lee, Chicago, Hollywood.)

NINE OF THE "TEN BEST" ON EASTMAN NEGATIVE

SUB-STANDARD FILM STRONG IN ENGLAND

J. P. J. CHAPMAN.
THE HUON
BRANKSOME HILL ROAD
BOURNEMOUTH ENGLAND

23rd December, 1939

To the Editor—

The year 1939 has been a momentous one for the Kinematograph Trade. The first blow came with a heavy tax on all kinds of photographic stock. Two more shuffles added insult to injury. It cost the Industry a staggering sum.

Owing to this tax, much footage of their Majesties' American tour has been lost. The propaganda value would have been untold.

Continued strain of international relations slowed the wheels of industry.

Then came the war. Theaters were closed, but after a while a more normal status developed. Trade has now settled down to a war footing.

The amateur societies have of course been curtailed through present conditions.

The 16mm. side has been jogging along in its usual steady manner. Imports from America are naturally severely restricted, and delivery difficult. Prices, too, have risen and have not yet reached high water mark.

It was expected that the sub-standard trade would slump, but just the opposite has been experienced. The black-out has kept people at home, and the demand for films and machines has exceeded all expectations. The secondhand market has had a good fillip.

Your paper is always a welcome visitor, being paramount in the Movie-World.

Congratulations on your publication, and a prosperous New Year.

Yours faithfully,

J. P. J. CHAPMAN, A.R.P.S., F.R.S.A.

AMPRO ANNOUNCES ITS FIRST 8MM. PROJECTOR

PERSISTENT rumors that Ampro was planning to enter the 8mm projector field have at last been verified by the announcement of the first Ampro 8 projector, which pioneers several features long desired by 8mm users. These include reverse projection, 400-foot reel capacity, built-in pilot light, and fully automatic film rewinding, controlled only by the motor-reverse switch.

The new machine, officially Ampro model A-8, is a sturdy, stream-styled machine equipped with a standard 500-Watt lamp, a color corrected optical system and a one-inch f1.6 projection lens. The operating controls are conveniently centralized on the base, and include in addition to the main line switch and lamp switch a motor reversing switch for reverse projection and rewinding.

Special provision has been made for cooling when operating the machine in reverse, and the cooling system, with its cool air intake across the film aperture, is said to be equally efficient for either forward or reverse operation.

Great attention has apparently been paid to durability and serviceability. The projection lamp is a standard, prefocused-base 500-watt bulb, and may be removed from the lamphouse by loosening two knurled knobs at the top of the housing. The heat-resistant condenser is easily accessible for cleaning.

The lens, which is in a standard mount, may be interchanged with other objectives of ¾, 1 or 1½ inch focal lengths. Lubrication is provided for by central oil distribution to all high-speed shafts, while the motor is equipped with grease-sealed, self-aligning bearings.

Convenience of operation is also provided by such refinements as micrometric tilting control, operated by a single knob; a conveniently located framing knob; the centralized electrical controls and the pilot light. Operating speed is controlled by a full-range rheostat. Large sprockets contribute to easy threading, and a special, heat-proof safety shutter and still picture control lever permit still-frame projection.

Rewinding is automatic, requiring only threading film from the lower to the upper reel and operation of the motor reverse switch. A convenient carrying handle is incorporated in the arm supporting the upper reel.

The new Ampro 8 is priced at $98.

McNabb Visiting Coast

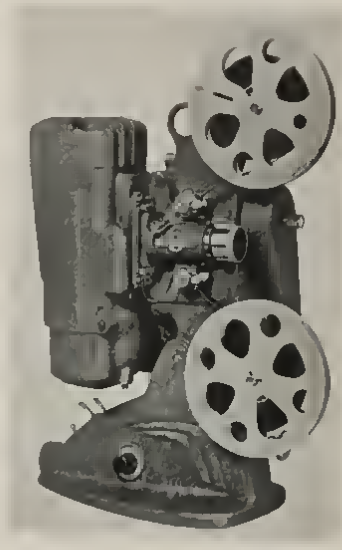
J. H. McNabb of Chicago, president of the Bell & Howell Company of that city, is in Hollywood for a couple of weeks. It is a routine visit, possibly just at this time a fortunate one. For the weather in Southern California during the time Mr. McNabb chose for his trip is slightly different from Chicago—or at least it was on the day of writing.

The Bell & Howell executive has been finding a little time to look over some of the local golf courses when his presence is not demanded at Western headquarters of the company in La Brea avenue.

Reeves Returns from Mexico

Art Reeves, of the Motion Picture Equipment plant at 7512 Santa Monica Boulevard, returned from Mexico City the latter part of January. With Mrs. Reeves and their two children he left December 12 for the southern city, driving the distance. His trip was more in the way of a Christmas vacation for himself and family, but he found his quarters at the Hotel Reforma were no secret to the motion picture trade, with the result he had a host of visitors. And his intended Christmas vacation became at least a 50 percent business trip.

New Ampro 8mm. projector



Amateur Progress in 1939 Exceeded Professional

By WILLIAM STULL, A.S.C.

In Two Parts — Part II

Special-process Cinematography

Outstanding in the field of special-effects cinematography is the increased use constantly being made of extremely large-scale transparency background-projection process shots. By means of the triple-head projectors, which superimpose three images of the same background scene on the screen, and the use of modern super-speed films, process-shots of a size never before possible have been achieved.

In some instances notable outdoor films have been made almost entirely by this technique, at notable savings of money, time and effort, and with virtually no sacrifice in quality.

In at least one studio, it is reported that experiments are being conducted toward the development of a single-film projection head equipped with a triple lamphouse.

As has been mentioned, these developments have also greatly increased the scope of special-effects cinematography in natural color.

Set Design

A notable advance in this closely allied field is the system of standardized colors for set painting developed by Jack Otterson and Joseph Valentine, A.S.C., at Universal. In this four standardized colors are used, each appearing in four standardized values ranging in each case from dark to light.

The photographic values of these shades correspond closely to their respective visual brightnesses. The system has been found virtually to eliminate the need for repainting, to permit the use of less light, and to produce more pleasing effects on the screen.

The completion of the new Cinecolor laboratory was the most notable event in this field during 1939. For almost the first time it offered the many users of bipack laboratory facilities comparable in capacity to those available in three-color cinematography or in monochrome.

A most interesting development has been the introduction of a direct-reading photoelectric densitometer designed by C. S. Franklin, and already in use in several Hollywood laboratories.

Sound—35mm.

The principal innovation in professional sound technique has been the pioneering, already mentioned, in the use of newly introduced fine-grain positive stock for sound recording and printing.

RCA introduced a most interesting multi-purpose microphone known as the "Cardioid" microphone, due to its heart-like shape. This microphone may be used interchangeably as a unidirectional, bidirectional or non-directional microphone, the change being controlled by a switch governing the two separate microphone units of which the device is composed.

The same firm's "Vocoder" speech-synthetizer was demonstarted at several Hollywood gatherings, and while it has not as yet been utilized in this field, shows remarkably interesting possibilities, especially in connection with cartoon production.

What is said to be the first independently made 35mm. re-recorder or film-phonograph was introduced by Art Reeves.

The use of 16mm. sound-films for educational and industrial uses increased apace, although none of the rumored 16mm. recording units for amateur use materialized. The Berndt-Maurer Corporation, however, announced a series of synchronous motors for driving 16 mm. cameras at sound speed, especially with a view of assuring adequate maintenance of sound speed so that the film would be suitable for the later application of synchronized accompaniments, narration, etc.

8mm. Synchronized

In at least one instance an amateur, using disc synchronization, succeeded in making a completely synchronized talking picture in 8mm.

In England a very interesting system for putting sound to 16mm. film appeared in the "Tanar Link." This consists of fittings comprising two additional take-up arms mounted on a unit which serves as a sub-base for a standard Bell & Howell Model 138 Filmo sound sound-on-film projector.

By means of this device, which is reminiscent of the so-called "preview heads" professionally used for running separate picture and sound film on a single projector, any silent 16mm. film—regardless of the speed at which it was photographed—may be given a synchronized musical accompaniment, narration, etc.

In the "Tanar Link" the front arm of the projector holds the picture feed reel, while the rear arm, normally the take-up, holds the sound feed reel. The front arm of the "link" takes up the picture film, while the rear one takes up the sound film. The sound pick-up is through the projector's regular scanning unit.

Since this system eliminates the necessity of duping the picture and printing the sound track to form a single, composite sound positive, it is claimed to reduce the cost of 16mm. sound by nearly two thirds.

Projection

In the professional field, the most notable development was the suggestion advanced by J. G. Capstaff for the use of an illuminated white border in place of the conventional black screen border.

In the amateur field, however, a wide variety of developments can be noted. Perhaps the most spectacular is the recent introduction abroad of the Bolex-Paillard five-film sound projector.

This accommodates 16mm. sound or silent film; 9.5mm. sound or silent; and 8mm. silent.

Some of our readers abroad who have owned and used the machine report it to have excellent sound quality—especially, of course, in 16mm.—and picture quality which justifies the makers' claim that its efficient optical system makes its 750-watt lamp at least the equal in light-output of any 16mm. projector using incandescent illumination, regardless of wattage.

In this country there has been a marked trend toward the introduction of a new range of lower-priced 16mm.

Another One of Those Things

YOU see, it all happened like this It was one of those errors discovered before the issue was in the mail, but after the edition was printed Last November we were trying to tell a story of how Theodor Sparkuhl, A S.C., made a couple of Leica as well as other exposures at Earl Carroll's theatre-restaurant Declared the presumably authentic caption.

The new DuPont Superior Type II negative was used, exposed 1/50th second at f 2.3—the same exposure given by the motion picture camera.

Along about January 17 there was a call on the phone at the editor's desk A male voice asked "Will you tell me the meaning of 'f 2.3'? I have asked around and no one can tell me"

"Sorry, brother, but I can't help you."

"But it was in your paper"

"It was. Oh-oh In December? Wait till I get a book Yeah, I find it right in front That, of course, is a typographical error That was written f-2 3, but as it was printed in italic the small caps in the keyboard were partly represented by figures The small caps were in line with the italic on the double-lettered matrix The error came in a correction when the operator failed to lower the matrices involved The figure 2 carried the B and the figure 3 the C. So f 2 3 is right Thank you so much for calling."

"How'd you know about that linotype thing?" asked our caller His voice sounded a trifle skeptical

"That's really a long and almost—at times—a forgotten story But I thank you so much for calling."

sound projectors for school and commercial use by all manufacturers, and at least one of these (Bell & Howell) has introduced a special 16mm sound projector directly intended for home use

Two completely new projectors in the upper-class bracket of the 8mm. field were announced respectively by Eastman and Ampro The former, known as Model 70, features improved mechanical construction, centralized controls, an f 1.6, color-corrected projection lens and interchangeable 300, 400 or 500 watt globes

The latter signalizes the entry of a newcomer into the 8mm. field, though Ampro is already widely and favorably known for the manufacture of fine 16 mm projectors. The Ampro 8 presents several definite innovations in American 8mm. projector design

Among these may be mentioned that it is the first to provide reverse as well as forward action, and one of the first, if not actually the first, to accommodate 400 foot reels

The pressure ventilating system is designed for efficient operation in both forward and reverse motion A standard, prefocused 500-watt globe is used with a color-corrected optical system and an f/1.6 projection lens. Centralized controls and an automatic rewind are incorporated

Still Photography

In studio still photography the demand for natural-color stills increased, and it became evident that for the majority of outlets the Kodachrome process was definitely displacing all other types, including 'one-shot" paper-print methods.

An important innovation for high-speed synchro-flash stills work was the introduction of the Kalart "Sistogun" synchronizer for Graphic focal-plane shutters, and the H C E synchronizer for Graflex shutters

With the long-peak (wire-filled) flash-globes these synchronizers make possible the photographing of extreme high-speed synchro-flash pictures, especially at shutter-speeds from 1/200 to 1/1000 second

A decidedly interesting development was the method evolved by Steve Hansen, of Hollywood, for making portrait quality still enlargements from motion picture negative. In this several successive frames of the 35mm negative are exposed to make a single print, using a pilot-pin equipped enlarger The superimposition of the several negatives in the single print virtually eliminates the usual effect of graininess

During the year the introduction or improvement of several American-made miniature cameras, including the Agfa-Ansco Memo, the Argus C-3, the Perfex, the Detrola, and others, marked the first appearance of American-made 35 mm. miniature cameras capable of any degree of competition with the established, European-made types

With wartime conditions restricting the importation of most of these latter cameras, it is to be expected that American-made, high-grade miniatures will make further notable strides both technically and commercially

Television

With the granting of a limited number of licenses for television transmitters, and in some cases permission for semi-commercial operation, the stage seems set for a considerable advance in television

As we go to press, an announcement by officials of the General Electric Company that the problems of linking television stations by air, apparently by means of super-powered receivers, has made the use of prohibitively costly coaxial cables less necessary, appears to have at least potentially minimized the problems introduced by the limited range of the ultra high-frequency television carrier wavebands

But perhaps the most significant of all is the production, in Hollywood, by Dr Friedrich Feher of a series of musical short-subjects intended not only for theatrical release as motion pictures, but as transcribed video programs for telecasting In this, possibly more than any other development of 1939, we may see an indication of the future of motion pictures

New Hampshire Transfers White Mountains to Screen

(From the Film Daily)

For Americans to go to the White Mountains is usual But for New Hampshire to send its mountains to Americans is unusual This the astute Planning and Development Commission there has done in a grand and bound-to-be-resultful manner The medium is one of the best two-reelers ever to be fashioned as good-will ambassador for a community's industrial and recreational advantages.

Christened "The Ninth State," in proud recognition of the fact that New Hampshire was the ninth of our original national entities to ratify the United States Constitution, this two-reeler, expertly produced, directed and even authored by Emerson Yorke, is a natural for the non-theatrical field in its present length, and just as much of a natural for the commercial pix houses in a shorter version

Cinecolor is used to convey the inherent loveliness of landscapes, and make more real and vivid the austere, inspiring White Mountains J. Burgi Contner, A S C , was the cinematographer; Alois Havrilla, commentator, Solita Palmer, the fashioner of the original music score, Lindsay McPhail, orchestrator; Jack Shilkret's Orchestra, the recording ensemble; Phil Rein, sound engineer; and Fletcher Smith, creator of the titles.

The picture covers an amazing amount of subject matter,—historical, cultural, industrial, recreational But interest never wanes

Panel for Filmo-Master

From Bell & Howell comes word of another improvement on the Filmo-Master 16mm projector—a centralized switch panel Conveniently located just beneath the lamp base, the switch panel holds both motor and projection lamp controls, eliminating the line switch on the cord Independent use of the pilot light is also permitted by this addition

Bell & Howell also announces that this switch panel can be added to any Filmo Model 57 projector now in the field

LIGHTING FOR INTERIORS

CLAUDE W. CADARETTE

Founder, Los Angeles 8mm Club

THE pictorial attributes of a picture depend on the proper uses of certain phases of artistic elements which are found on every canvas of renowned artists. These elements are necessary for an excellent picture, and the pictorial result is achieved by combining all of them correctly.

A picture that contains excellent composition, beautiful color, interesting subject and unusual angle may prove displeasing if the lighting is not properly aligned. Correct lighting is an integral part of good composition and balance, whether it is in a black and white or colored picture.

In photography the essential point is not the precise reproduction of the subject, but rather a reproduction which is pleasing to the eye without loss of identity.

Through correct lighting we tend to acquire in our motion pictures that which is done by a retouching artist in a photographic studio. We try to accentuate and delete certain high lights in an effort to glamorize our subject.

Light, and its control, requires much study and experimenting. By distributing light evenly over the surface of a ball and a cone you will make them appear as a circle and a triangle. The objects did not seem to have body or solidity due to this flat lighting.

Holes in a Sheet

A scene or person's face photographed under these conditions would not be satisfactory because the shadows were destroyed. A portrait of this kind would be formed only by the contrast of the lips, eyes and brows. As this contrast would be too extreme, the eyes would appear as two holes in a sheet.

Leaving the ball and cone in the same position, and moving the light source behind them, we will see that each object is rimmed with light, but we are not able to distinguish their true shape as the faces of the objects are in deep shadow. This is known as back lighting.

Now by placing another light to one side to illuminate the faces we create a contrast on the faces which gives us the sense of solidity. But as the shadow is too deep on one side of the face we must cast a third light to lift these shadows somewhat.

This third light must be farther back so that its intensity is less, otherwise we would again have flat lighting. By shifting your front lights you will find a set-up where the ball and cone appear to have depth and body.

Arranging Lights

This arrangement of lights is necessary when filming portraits. One light is placed to illuminate one side of the face and another light is used to lift the shadow side of the face so that the detail will not be lost. A strong backlight is used to separate the subject from the background and illuminate the hair.

Use different arrangements of lights until you find the set-up that is most pleasing and flattering. If diffusing cloths are placed in front of each light source, the sharp lines between highlights and shadows are softened and the tonal gradations are evenly blended.

Beauty, glamour, or a glorified picture cannot be made with harsh light. The only places where harsh light is used are in police, scientific or commercial pictures. These pictures must be all

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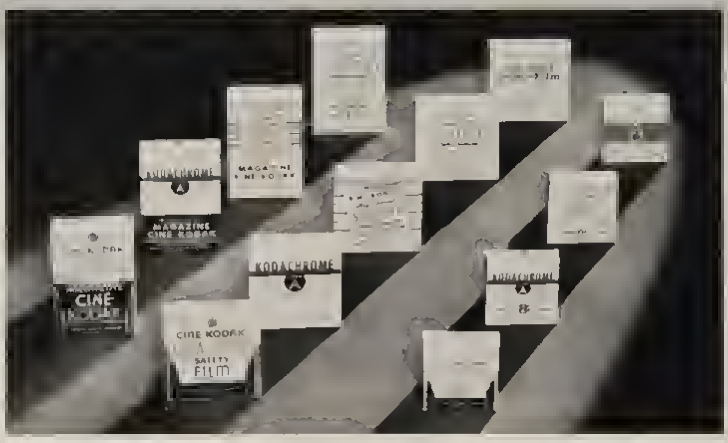
Evenly distributed light causes the face to appear flat. The lack of highlight and shadow loses the effect of roundness in the face.

A touch of backlight to accentuate the hair and rim on cheek with light coupled with a deeper shadow side of the face, gives a better illusion of roundness and solidity.

High angle lighting for any special effect. One lamp is placed overhead and a low light is used to lift deep shadows.

Every good shot deserves
CINÉ-KODAK FILM



YOU select the scenes you shoot with care, you make the exposures expertly. You have the right to expect results that will do justice to your subjects and to yourself as a cinematographer.

Naturally, you use Ciné-Kodak Film. It is uniformly reliable, completely responsive to your skill. There are five 16 mm emulsions, four in the 8 mm size. Whatever the work you have to do, there's a Cine-Kodak Film to do it—and do it beautifully.

16 MM. KODACHROME—For color of course, Kodachrome's the film. In two types, one for daylight use and Type A for use with Photoflood light, both are the same price. 200-ft rolls (from Rochester only), $10. 100-ft rolls, $6. 50-ft rolls, $4.30. 50-ft magazines or packettes, $4.65.

16 MM. SUPER-XX—Top speed, plus photographic quality. 200-ft rolls (from Rochester only), $13.50. 100-ft rolls, $6.75. 50-ft rolls, $3.75; 50-ft. magazines, $4.

16 MM. SUPER-X—A real achievement in film making. It combines adequate speed for most shots, with remarkable brilliance, clarity, and fine grain. 200-ft rolls (from Rochester only), $12. 100-ft rolls, $6. 50-ft rolls, $3.25; 50-ft magazines, $3.50.

16 MM. SAFETY "PAN"—A low-cost film of remarkable quality, generally reserved for use when the special characteristics of the other emulsions are not required. Ciné Kodak Safety "Pan" is supplied in 100-ft rolls only, at $4.50.

8 MM. KODACHROME—Kodachrome has taken command in the 8 mm. field, too. The practically grainless Kodachrome image projects beautifully on even the larger screens. Both the regular (daylight) and Type A emulsions are available at $3.40 per 25-ft roll.

8 MM. SUPER-X—This is the speed film for all 8 mm. work by artificial light or in poor outdoor light. Remarkably fine in gram, too. An immensely useful and popular film. In 25-ft rolls, $2.25.

8 MM. "PAN"—This is the famous film which made 8 mm. movie making first possible, then popular. It is a film of tremendous latitude, its speed is adequate for most movie-making opportunities. In 25-ft rolls, $2.

EASTMAN KODAK COMPANY, ROCHESTER, N. Y.

"Behind the Bottle" Tells Good Story

By WILLIAM STULL

Scene from "Behind the Bottle" picture made by William R. Hutchinson of Newburgh, N. Y.

So many interesting and often noteworthy amateur films are being sent in for review and analysis it has been decided to publish some of the reviews. Most amateurs read The American Cinematographer primarily to improve their understanding of moviemaking, and next to studying outstanding films on the screen perhaps the best way of doing this is to study reviews of such films, which analyze their strong and weak points—and tell why each is as it is, and how it could be improved. Such comments can often be applied to your own films, too.

"Behind the Bottle," Documentary film, 400 feet 16mm. Kodachrome. Made by William R. Hutchinson, Newburgh, N. Y.

BEHIND The Bottle is stated to be its maker's first attempt at seriously purposeful picture making, but it has a smooth completeness that many a more experienced filmer might envy.

Continuity is particularly well planned, for this story of milk begins with the delivery of the morning milk bottles at the housewife's back door, and then goes back to tell the whole story of milk, literally from the cow to the customer, ending again with the freshly bottled milk on the doorstep.

Technically, this picture has but two basic faults, both of which are remediable. First, since it is a color picture, the titles should also be in color, for black-and-white titles in a color film distract the audience's attention to technicalities.

Even if, as in this case, the titles are on colored (blue-tinted) positive film, the change from color to monochrome is irritating. In addition, it is seldom if ever possible for a projector to accommodate color and monochrome at the same focus setting; therefore if the picture is sharp—as it must be—the titles, photographed on film of a different thickness, will be projected slightly out of focus.

Easily Remedied

Second, especially in the earlier parts of this film there are a number of pans that are either too fast, or jerky, or both. It must be admitted that we haven't yet seen an amateur tripod that would assure consistently smooth panning, but with most of the better types between much practice and careful adjustment of the friction control, it is possible to get reasonably good pans once one learns to pan slowly enough.

Fortunately in this case virtually all of the offending shots can easily be trimmed down into two amply long static (non-panning) shots, eliminating the too fast or jerky sections.

The composition and camera angles in this film are excellent. They strike a rather rare blend between purely photographic decorativeness and strictly graphic exposition of the subject action. The sequence showing how the grain is harvested to provide feed and bedding for the cows is particularly effective in this respect.

The sequences in the milk plant's testing laboratory and in the bottling operations show commendable restraint in avoiding over theatrical compositions—which could easily be a temptation in such locations—and still tell their story with a hint of decorative pattern.

Many if not indeed all of these interior scenes seem to have been made solely by natural light, without benefit of reflectors (other than the white walls of the dairy, barns, etc.) or artificial light. They offer remarkable evidence of what can be done with modern color film and lenses; only a few years ago, such shots would have been difficult, if not impossible in black-and-white; today they can successfully be done in color.

Shoot Away from Midday

From all viewpoints, the weakest sequence is the one showing how corn is harvested and stored in the silo. Practically all of this seems to have been photographed—probably of necessity—under the most unfavorable lighting. The scenes in the field, showing the corn-binder at work, were made at midday, when the light is least suitable for photography.

In this case, the high corn-stalks threw the corn-binder into an impenetrable

Shots from "Behind the Bottle"

"Behind the Bottle" Tells Good Story

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shadow, and the high general contrast of both subject and lighting made this worse. Such scenes should be filmed in early morning or late afternoon, and from angles such that the sunlight front-lights the scene, showing the machine and its operation better.

Meter in Shadow

The same is true of the scenes showing the ensilage cutter cutting the corn and blowing it into the silo. This machine seems to have had to be set up in a deeply shadowed position. In this case, the exposure meter reading should be taken in the shadow itself—perhaps even with a slightly lowered film-speed setting—and the scene exposed for shadow detail, letting the few highlights (which in this case are unimportant) take care of themselves.

That, in fact, is the basic rule of photography—"expose for the shadows, and let the highlights take care of themselves." It holds reasonably good even for today's color.

Since the farm shown here does not seem to have been electrically equipped, the omission of a shot or two made inside the silo is understandable. This action is interesting, however, and the shots could very probably be made with the illumination of flares, using the curved wall of the silo to shield the lens.

Cutting Excellent

The cutting of "Behind the Bottle" is excellent. In general, it moves along very well, tells its story clearly, and seldom drags. A few of the early scenes showing cows—ever bad actresses—ambling in bovine contentment across the barnyard seem repetitious and should be shortened.

A word of caution, however, is necessary. If a film is intended for educational use, it can stand much more repetitious footage of important scenes or action than a film intended for general exhibition. This is necessary so that students—particularly children—may have time not only to see but to understand the scene.

Two other minor errors in cutting appear observable. In the opening sequence, the milk company's truck is seen delivering milk. In the first several scenes, it moves consistently from the left of the screen to the right.

Then it suddenly is shown coming from the right toward the left, which tends to confuse the audience, for the truck has been presented in several scenes as going somewhere, then, suddenly seen going in the opposite direction, it seems on its way back from wherever it was going, when suddenly it stops and the driver for the first time gets out and delivers milk.

This can be corrected easily by adding another shot in which the truck is shown entering from the left, then rounding a curve and going out in a generally leftward direction.

Added Scenes

The second minor editing error is in the shortness of the scenes following a title that states the milk is rushed from farm to bottling plant. But two scenes are shown, both with the truck already arrived at the plant. At least two further scenes should be added: one showing the truck leaving the farm, the other, showing it literally rushing along the highway.

The titling is excellent, a feature which is doubly commendable since we understand Mr. Hutchinson not only writes and photographs his own titles but prints them as well. The titles should, however, be filmed in color. There should also be several more explanatory titles to make clear some of the operations in the testing laboratory and perhaps in some stages of the bottling.

The closing sequence is an excellent example of the compression of time and space which is possible only to the moving picture. The camera returns us to the original shot of the bottles on the doorstep, and to stress what we have already seen at the start of the film—the use of milk in the home—scenes of milk being poured and of a child drinking a glass of milk are double-exposed over the shot of the bottles on the doorstep.

The whole thought is presented in a few seconds, with only a few feet of film—yet it is gotten over perfectly.

All told, Mr. Hutchinson is to be congratulated on the sound craftsmanship shown in making "Behind the Bottle." It is no wonder that when he showed his film—made purely for his own enjoyment—to the officials of the dairy whose facilities he had used, they asked for a dupe of the film for their own use in exploiting their service.

La Casa Moviemakers

At the January meeting of La Casa Movie Makers of Alhambra, Cal., Mr. Korns continued his lectures on film structure, Kodachrome being the subject. Mr. Moore gave final instructions on the scenario contest, which takes place in February. Mr. Powell ran a picture of the picnic given by the club last July. Some fine color shots made at night were shown. Mr. Moore showed some good continuity in his film, "About Town."

Mr. Reed developed a fine scenario in his "Watch the Birdie."

Mr. Oberholzer concluded the programme with many hundreds of feet of color made in China and the Philippines. Over a hundred members and guests enjoyed a fine evening.

R. A. BATTLES, Publicity Chairman.

Washington Club Looks On Unusual Kodachrome

By MILTON J. PIKE

The Tower of the Sun, Golden Gate Exposition

WHEN one meeting of an amateur movie club, in a long series is so outstanding as to fall in that proverbial "man-bites-dog" category, that would seem a propitious time to tell the world about it.

And, by unanimous acclaim, that's what happened at a recent meeting of the Washington Society of Amateur Cinematographers, held at the Ambassador Hotel, with President Reed Haythorne, A S C, presiding

Responsible for this out-of-the-ordinary interest was Eddie Foreman, at present a prominent Washington amateur and destined, in our opinion, to go places in the movie world. Mr Foreman is associated with John V Hansen, vice president, Amateur Cinema League, Inc.

After attending numerous camera club meetings, the best gauge, it would seem, of the popularity of a program, is in the amount of time, after the meeting closes, required to slow the momentum gathered during the progress of the meeting And it was well after midnight when the members finally ran out of questions

Shown Fifty Times

Mr Foreman, about two years ago, made a 16mm black-and-white film for the Riggs National Bank of Washington. The picture, titled "60,000 a Day," succeeds very well in showing the numerous and varied stages through which a check passes from the time it is drawn by a customer until returned to him at the end of the month.

After his film had been viewed by the directors of the bank Mr. Foreman was given the assignment of showing it to audiences in and out of Washington, in the furtherance of increased public interest in the bank and its services

During the past two years the film has been projected for more than 50 audiences, totaling 20,000, and is still much in demand both in and out of the banking profession The photography is uniformly excellent throughout and Mr Foreman told his story extremely well in his resort to many closeups Many fine angle shots go to make up the 169 separate scenes

The banking picture was followed by 400 feet of 16mm Kodachrome which Mr Foreman took during his vacation this summer on the Pacific Coast and in Grand Canyon His shots of the San Francisco World's Fair were unusual in their beauty of color, composition and angles, and they met with repeated applause from the members as each shot, reluctantly to the audience, gave way to the one which necessarily had to follow

For each succeeding shot was so outstanding in sheer beauty that the entire film literally had the spectators on the edge of their chairs

From the fair Mr Foreman took his audience down along the coast, where he obtained some striking pictures of the Pacific and of the Mission at Santa Barbara Leaving the coast, he headed east and pointed his camera at the Grand Canyon

In many instances, he resorted to a polarizing filter, and in some of the cloud shots obtained by this method formations stood out in snowy whiteness and in startling reality against a darkened blue sky In one case, the use of the polarizer produced an absolutely black sky, the strange, flamy beauty of the rocks in the foreground standing out in full color.

4000 Feet in Two Weeks

The strange colorings of the rock formations in the canyon were caught with absolute realism and the breathtaking experience one gets in standing on the edge of the canyon and looking into a mile-deep gash in the landscape was caught in the beauty of this strip of celluloid The illustrations on these pages were reproduced from the film.

The comment which accompanied the film added immeasurably to the interest and enjoyment, and each member of the audience enjoyed for a few too brief minutes the swift flight from reality to this fairyland in Kodachrome

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Handicaps Against India's Film Production

By F. BERKO

In Two Parts—Part I

IN the October number 1939 of American Cinematographer I gave a general survey of the Indian film industry as a whole The great difficulties with which it is confronted because of its methods of financing, producing, distributing and exhibiting films were summarily outlined

In this article, I want to go more into detail about the administrative and purely technical aspects which are the cause of the many problems Indian film production has to contend with

Furthermore it must be mentioned that in a short article of this kind there must necessarily occur all kinds of generalizations, and while some of the things said might be unpleasant to those of the Indian film industry who are earnestly striving to avoid them, and perhaps even succeed in doing so, they are correct for the industry taken as a whole, and given for that reason only.

On most of the points, moreover, the more intelligent and critical part of the industry and of those interested in it are quite of the same opinion, and have frequently expressed themselves to that effect- A healthy criticism is necessary for development and without recognizing —and openly admitting—faults, they will never be remedied It is in this sense that the present article is written

Part 1: Administration

If the cause of all the troubles and problems in the Indian film industry could be stated in the shortest possible way, it would undoubtedly have to be expressed by the three words "lack of organization."

This lack of foresight and organization can be found at every single stage of film production It is its organization which makes Hollywood the most efficient film producing center in the world, and it is the complete lack of it which, more than any other deficiency, cripples any healthy development of the Indian film industry

To start at the beginning In general, it can be safely said that hardly any film is started in India with a completely thought-out and finished shooting script There are practically no proper literary or scenario departments. Stories, on the whole, are mostly rehashes of old or contemporary films, they sometimes are written by a special writer attached to the studio, more often by the director himself, very seldom are original outside stories accepted, although they are often partly utilized in the final scenario.

Except for the bigger and better organized companies, the studio is usually busy with one film at a time, and the writing of the scenario starts only when the shooting of the film in production is finished

Two-Four Films a Year

This means that, apart from keeping the staff idle—of most of it is not dismissed and re-engaged later on, anything from two weeks to two months might pass before the shooting of the next film can start

As the actual shooting—for reasons given below—may take anything from one and one-half month to nine months, it is easy to see why the one-unit studios—and a great percentage of the films produced annually comes from them—cannot produce more than two-four films a year, four being already an exceptional case

When the scenario has advanced far enough for shooting to start, and as there are hardly any properly trained or qualified men to prepare it, it emerges already slightly changed after a special dialogue writer, versed in the particular language in which the film is made but without much knowledge of film dialogue proper, is through with it, a cast is chosen

Except for a few rare instances, the roles do not fit either the few stars and actors permanently engaged or those actors who are newly taken on. As till recently even in England, in India, too, only to a much greater extent, there are not sufficient character and "bits" actors, and the few there usually are attached to their studios.

Hence, most of the supporting cast neither look nor are able to play their parts, being recruited to a great extent from completely untrained people

Scant Rehearsals

As the director, who is often also the producer, and then has a virtual dictatorship over the whole company, partly necessitated by the fact that he is the sole brain and has to do everything himself has had no free time so far, and as a rule does not consider it necessary, the parts are usually not rehearsed till the actors are on the stage.

As scenarios are hardly ever available, the actors try to obtain their dialogues from the dialogue writer,—that is to say, if they have any real part at all, and if they take an interest in the film,—and rehearse their dialogues for and among themselves

As moreover, as already stated, the scenario is hardly ever complete, or at the time of shooting to the director's liking, dialogues are often, as shooting itself is, too—done "from the cuff" If the result of this is to match the rest of the film in mood, speed, etc., exceptional gifts are required from the director, which he, being not properly trained and mostly self-made and without much culture, does hardly ever possess.

Consequently, the stuff thus done is incongruous with the rest of the film, if its scenario has had any real congruity from the beginning, which in most cases, for the reasons given, it does not have

Because there are no proper preparations, orders for sets, wardrobes, furniture and other properties are given much too late The result is that hardly anything is ready at the time it is required, that nothing fits, and that a lot of time—and money—is being wasted

For most of the staff, by the way, waiting, interrupted by periods of fright-

fully hurried work, and a lot of overwork is the main occupation.

Music Has Best Chance

The only exception to the rule is the music department. As every Indian film has to have at least four-six songs, on the response to which by the main body of the public the success of the film usually depends, even a small company has its own musical director who not only composes the tunes—repetitive because of fixed limits to Indian music—and writes the text, which has to fit, or at least should fit the situation, but who also rehearses the singers and his orchestra.

He usually is given the number of songs, their contents, etc., as soon as they are known, and has therefore the best chance of the lot to get his stuff rehearsed and brought up to standard by orchestra and actor-singers alike.

With this exception, however, the state of affairs is still very unsettled when the cameras actually start turning and, as we shall see, this inadequacy of preparations also considerably add to the various difficulties already confronting the technicians.

Part II: Production

(1) Photography

It has been noted above that as a rule dialogues are not rehearsed in advance, nor are sets discussed sufficiently, if at all, with the people concerned, that is to say with the art department—hardly existent in our meaning of the term, with the research department—entirely absent—and with the director of photography (who is operating cameraman as well).

Hence, camera angles and movements are decided upon on the spot, usually by the director alone, and as sets are constructed without the slightest regard to the requirements of photography, almost any interesting camera angle or movement which might improve the quality of the film could not easily, if at all, be executed even if it were provided for in the script or thought of at the time of shooting—both of which it seldom enough ever is, though.

The lighting equipment is, on the whole, very inadequate and inefficient, and while some of the latest Mole-Richardson spots are also being used by a few studios, they are in the company of old lights, and then all the more difficult to use.

Electricians Few

No arcs are being used in India even at the present day, the reason for this being the refusal of the insurance companies to insure the mostly non-fireproof sheds and studios against the "open flame" of the old-time arc; and as cameramen usually occupy a very subordinate position in Indian film companies, even if some of them would insist on arcs, they would not be able to persuade producers as much as to talk this matter over with the insurance companies.

Apart from fixed banks of floods, suspended by chains from the catwalks, up to very recently, lights were not put up on top of the sets—the substitute for galleries, etc., only present in a couple of studios, and had to be shifted around on the ground.

As there are no electricians and chief electricians in our sense of the word, the cameraman and his assistants often had and still have to help the one-two electricians to move the lights about.

Even when the lights have been fixed on to the top and corner of the settings, every time they have to be changed one of the coolies—who also have to carry the cameras, act as grips, etc., as described later on—has to climb up to them.

This and the execution of the cameraman's orders takes more time than is liked to be spared for the cinematographer, and consequently the lights often have to be fixed in such a way as to give general illumination only, which is to say the least a waste of the few precious spots.

Every decent studio has at least one good studio camera apart from old standards and 400-foot Eyemos. As the cameras are being very roughly handled, however, and as no proper repair departments are attached to most of the companies, they do not give faultless service for any length of time and on the whole have a comparatively short life.

Prefer American Cameras

That is also why the sturdy American cameras are preferred—if financially possible—to the rather more delicate European Continental models.

Apart from the aforementioned difficulties—his subordinate position, no preliminary discussion with the director, difficult sets, inefficient and not very mobile lighting equipment, etc.—the cinematographer also is up against a certain immobility of the camera, and the insufficient and insufficiently trained camera crew.

There are only a few dollies in India, self-made, crude, bumpy trolleys being mostly in use, and there is in the whole of India only one crane, an Indian-made, clumsy, heavily vibrating affair.

The trolleys usually are moved by the same coolies who carry the cameras and, in outdoor shooting, the reflectors, move the furniture around, fix the lights, etc., and who consequently are not very efficient as "grips."

Outdoor shooting incidentally is practiced to a comparatively greater extent in India than anywhere else, because of the eight months of uninterrupted sunshine, and because of its essential simplicity. There are no lights being used outdoors, except by one company, and as the sunlight is very hard, even in the mornings and evenings unless it be very early or very late in the day, reflectors have to be used extensively in order to lighten the shadows.

Usually, they are of the hard, silver type and, combined with the strong sunlight and the heat, make it very difficult for the actors to keep their eyes open.

Hard on Eyes

Very little experimenting is done—or allowed—with shutter openings and filters, and as a rule, the shutter is left at 170 degrees, the diaphragm closed down and an Aero II, G, or, at the most, 5N5 filter put on.

The results are accordingly, especially as no attention can be paid to the directions of the cinematographer, if any should be given, to the laboratory. The problems the latter has to contend with make it virtually impossible for the cameraman to be sure of consistent results, and while, till recently, the laboratory chief usually had the better of the argument when he and the cinematographer put the blame upon each other when results were bad, now the cameraman has at least one alibi if he belongs to the few who are able to work with a reliable meter in the studio.

There are no special effects departments attached to any studio, and as there are only two-three background screens and projectors, and no optical printers, in India, here, too, the cinematographers have to face a lot of problems which even their undoubted ingenuity is not always able to solve satisfactorily.

[To Be Continued]

Gene Kornmann of Twentieth Century-Fox Film Corporation's portrait gallery has just published a booklet, "Lighting the Stars," which is now available at all Eastman Kodak Stores as well as at other photographic dealers. This interesting booklet for both amateur and professional photographers contains outstanding portraits of Hollywood's most famous stars with lighting diagrams and complete photographic instructions explaining how these unusual portraits were obtained and captured by his camera. Gene Kornmann has photographed practically every noted star in Hollywood during the last two decades, during which time he has taken more than a million and a half pictures.

Hunter Talks of Other Days

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tention of the surgeons and nurses And that was a horseman who inadvertently fell from his mount and thereby broke a leg

While naturally there were minor accidents in the recent staging of big scenes no serious casualties were reported

Close Call

There was one mishap, however, which threatened to become a major catastrophe in that earlier period. On the eve of the day on which the twenty-six cameramen were to photograph the great mob scene the director announced that if any one of the twenty-six men should fail to perform in faultless fashion in his full duties as a photographer a demand would be made to retake the work of the whole day

That meant 2500 extras as well as 500 horsemen would have to be reengaged Three thousand men at, say, $5 a day would mount up to $15,000 The other expenses of the production easily carry the cost to double that amount.

While the demand probably might not be honored there certainly would be a controversy that might cause interminable delay Then again production departments in those days were not apt to be quite so vocal as they became through the course of years

Anyway, when the film showed up in the laboratory it was more than plain that one cameraman had skipped a cog On his shot of the slate Mr A had used a three-inch lens. In switching to a two inch lens for his picture of the scene he had failed to remove his lens cap—and the film was blank.

$30,000 in Balance

There was no time for discussion. The laboratory head also was the camera head There was $30,000 at least in the balance Quickly taking the slate of Mr A and removing from it the blank film Mr Hunter duplicated the good two-inch shot of Mr. A's partner, Mr. B, and added it to the slate of Mr A The two men had stood side by side as they worked.

When the rushes were shown the big boy was sitting in the projection room with his most hawklike look He was carefully examining each slate and the name of the cameraman on it as the slate appeared

On came the slate of Mr B and the film which had been taken by that cameraman It was okey The laboratory head now was quite nervous The film was followed by the good slate of Mr A and the added film taken by Mr B It was identical with the "take" that had preceded it, but had not the men stood side by side when it was taken?

The laboratory chief was watching the director. The director was watching the screen, but his expression was unchanged The lab chief breathed more freely

Successful Ruse

The ruse was successful There would be no fight for a retake and the thousands of dollars were safe.

On each occasion of the making of "The Hunchback" the film exposed was Eastman. In 1939 the run of the mill was Plus X, with a Weston daylight of 64 In 1923 the Weston daylight equivalent probably was about 12, according to authorities That is quite some difference.

Then again in the matter of lenses there is a wide variety in the standards obtaining in the two periods. Joe August, A S C., who directed the photography on RKO-Radio's "Hunchback," agrees that an average lens on motion pictures today would be f.2.3 and that in the former days f-3 5 and even f-4 5 were used. He speaks rather tenderly of the f-3.5 and especially of the f 4.5, and it is plainly to be seen he observes there are advantages in the former standards.

Bell and Howell Introducing New Type of Red Ray Carbon

A new type of carbon, said to produce illumination much higher in red ray content than heretofore available in arc lamp projection, is announced by the Bell & Howell Company, and is said to be of major importance in the projection of 16mm. Kodachrome film.

All Kodachrome film is especially corrected for projection with incandescent light, which is high in red content, and when this film is screened with arc lamp illumination, which is deficient in red, there is a slight coldness of color

With the introduction of the new type carbon, this deficiency has been overcome, says Bell & Howell, and the colors in Kodachrome will screen in their true warmth and tonal values Projection of black and white film remains unchanged.

Film on Impaired Hearing

"Life Begins Again," produced and distributed by Western Electric Company's motion picture bureau, is a highly dramatic presentation telling how many of the more than 15,000,000 Americans suffering from hearing deficiencies can be enabled to hear again

The picture dwells particularly on problems arising in the case of school children who have impaired hearing and demonstrates the correct procedure for discovering hearing deficiencies by means of audiometric test. Included in this film is an interesting animated sequence which demonstrates clearly how the human auditory system functions. The film is available to theatres without charge

Agfa Ansco Introducing Two New "Flash" Cameras

Two new Agfa cameras, the B2 Shur-Flash and the A8 Cadet-Flash, make the snapshot day 24 hours long—for the synchronizing mechanism in no way interferes with the use of the camera for outdoor picture taking. At night, or indoors, the separate flash unit can be quickly and easily attached to adapt the camera for making synchronized flashlight exposures

The flash unit is light and compact, providing a polished metal reflector on a light-weight plastic base. It uses two penlight-size batteries and can be fitted with any one of several types and sizes of standard photographic flashlamps.

The B2 Shur-Flash camera takes eight 2¼ by 3¼-inch pictures per roll of B2 film. It provides a high-quality, meniscus lens; two diaphragm openings; an optical, direct-view finder; easy loading arrangements with a hinged back having a secure latch; compact, rigid construction, and an attractive waterproof covering trimmed with black enamel and satin finish chromium. The retail price of the Agfa B2 Shur-Flash is $3 95 (including flash unit, but without lamps or batteries)

The A8 Cadet-Flash takes eight 1⅝ by 2½-inch pictures per roll of A8 film. Priced lower, it nevertheless is a staunchly-built camera with high quality lens and shutter elements.

New B & H Filmo Master 8 Marked by Many Features

Just announced is the new Filmo Master 8 Projector, latest product of the Bell & Howell engineering laboratories. The Filmo Master 8 is fundamentally the same as its highly successful predecessor, the Model 122 Filmo 8, but the new unit is even further refined and improved by many new features

Like its predecessor, the Filmo Master 8 has the B&H film-protecting, side-tension feature, all-gear drive, electric rewind, still picture clutch, framing device, and ability to take 300, 400, or 500 watt lamps There is no increase in price

Alhambra Moviemakers

At the December meeting of La Casa Moviemakers of Alhambra many interesting films of travelogues of the past summer were shown Miss Turnbull made a very fine color film of her Mediterranean cruise.

Mrs Gilman explored Guatemala and brought home the entire trip in color.

Miss Wanda Taylor, with her mother, toured Europe just before the outbreak of the war Her adventures are well shown in her film, also in color.

Over a hundred members and guests enjoyed a fine evening

R A. BATTLES, Publicity Chairman.

PROJECTOR AND CAMERA WIN COLLEGE FRIENDS

SECOND INSTALLMENT

By George Oliver Smith

When I was only fifteen years old and a sophomore in high school I wrote you (with the help of my mother) about my movie business and you published it with my picture Was I ever Proud! But that was so long ago I thought you might like to have another chapter about this interesting hobby, since now I am a freshman in college and know a lot more about movies—and am just as "bugs" about them as ever

As I told you before, one of the first and the worst things I did was a play by our Latin Class entitled "Aeneas and Dido" Although I am humiliated pink over the awfulness of the shots and the acting now, I find in educational journals that such projects are being promoted by advanced educators So at least the idea was a good one and we were on the right track

The next summer my mother and I tried a much simpler picture, We used Kodachrome film and called the picture "The Happy Farm Woman" It has a story with titles in verse telling how the farm woman compared herself with the Duchess of Windsor and decides she prefers Pa to the Duke and her own simple tasks to the life of a Duchess.

Has Local Run

We sent this film to your 1938 contest and was much surprised—and overjoyed—to receive an honorable mention in the documentary class The picture had quite a local run and netted me quite a little of "what it takes"

The Happy Farm Woman was a well loved person in her community, and so all of her friends had parties and meetings for showing it It was also featured at the University Extension Women's Vacation Camps (since my mother helps with the programs).

At the suggestion of an insurance adjuster I had a business card printed with my name, address, and in small letters "Moving Picture Producer," "home, documentary, and claims evidence."

So far business has not been pressing, but I have had quite a few requests for pictures; I take weddings, babies and even had to take a funeral scene which I confined to flowers

At college I find my little projector and camera has won me many friends and given me a certain standing, besides helping me make a little money I also have discovered many new fields opening up for pictures

I took a forty-five minute production of the Home Coming Events, including the football game and stunts and decorations, with silhouettes around the bonfire They were pretty good effects if I do say so! And since I have the only movie on the campus there are no end of requests for the picture

My industrial art teacher wants a picture on the Art of Lettering I have the script nearly finished Will tell you how that turns out later

I forgot to tell you about the World's Fair picture I took at the Golden Gate Exposition I have a full evening of pictures of my trip, and have worked up a talk that sort of holds the pictures together These are in color, and I was lucky to have a sunny day while I was there This has made a popular show

I am plenty thankful that I got over as many hurdles as I did in this business when I was just a kid, because so many fellows who have movies as a hobby do not start until they can afford expensive equipment, and then they start out by panoraming everything in sight, with the result that, because of poor photography, they soon lose interest in their own pictures If they had started learning the art of taking pictures when they had more time to devote to it they would take pride in their work

I expect to add to my reel of celebrities when the premier showing of "Northwest Passage" comes to Boise.

I am now planning to hitchhike with a friend to Southern California as soon as school is out and if I do I'll come to see you because I want to learn to find my way around, and I believe you are the kind of a person who would direct me right.

Zanuck Directs Program of Academy Research Council

Darryl F Zanuck, vice president in charge of production of Twentieth Century-Fox Studios, will direct the cooperative technical program of the Research Council of the Academy of Motion Picture Arts and Sciences during 1940, having accepted appointment as chairman of the Research Council He will represent the producing companies in directing the Council's efforts to raise efficiency, lower costs and improve sound and picture quality throughout the world

During the past month, plans for enlarging the Council's scope and increasing its value to the industry have been under consideration As chairman, he will participate in and supervise these expanded activities, which will encompass the fields of photography, laboratory processing, sound recording, motion picture optics and sound and picture projection in the theatre Thirty-one technical committees now operate under Council auspices

Darryl F Zanuck

Mrs. Zimmerman Entertains with Films at Ebell Club

At the Ebell Club, Los Angeles, on the afternoon of January 23 Mrs Charles Zimmerman showed Kodachrome pictures she had taken last summer in Europe Mrs. Zimmerman had earlier in the month showed a small section of her pictures, that taken in Holland, to her fellow-members of the Los Angeles Cinema Club Those she had put on at the Ebell included travels in England, Holland and Germany

The pictures were displayed in Browning Hall before several hundred members of Ebell Mrs Zimmerman stood alongside the screen and described scenes as they were shown, her youngest son manipulating the projection.

The club members of Ebell were enthusiastic about the pictures, as well they might have been They were ran more than an hour, stopping at 4 o'clock in honor of the traditional afternoon tea at the club at that hour Some of the members were anxious to proceed regardless.

The photographer did not exactly satisfy her fellow-members when she announced she would have to forego the running of the Switzerland pictures as there would not be time She somewhat regretted that fact, too, as the Swiss pictures had appealed to her as the best she had taken during the summer It was declared, however, by the house they would see those at another time

The pictures were notable for the evenness and quality of their exposure One of the factors lending to the value of the films was the fact they were made in the two months preceding the opening of the war, Mrs Zimmerman and her party of five—a daughter, two sons and a woman friend—getting away from the shores of Europe on the day hostilities were opened

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Lighting for Interiors

(Continued from Page 79)

revealing and the smallest detail photographically recorded.

Diffusion blends small skin wrinkles and softens the contrast of skin blemishes. The shadows and highlights blends so that a smooth roundness is made in the cheeks. Notice the portraitures made in Vogue or Harpers Bazaar Magazine.

The beautiful closeups on the professional screens are not due to make-up alone, but by the right distribution of light by the cameraman.

Light can be diffused at two places, namely, the light source or the camera lens. For indoor motion picture work, it is advisable to diffuse your light at its source as you are usually filming at a large diaphragm opening which in itself gives some diffusion. Also, you have more control by diffusing light sources, as you may want the background heavily diffused and the subjects lightly diffused.

For proper lighting effects in indoor filming there are certain rules which are generally accepted as fundamental requisites. However, most rules can be broken when warranted. The type of picture, the tempo or mood may call for effects not classified as basic principles of lighting.

Photography requires three types of lighting: low key for sadness or mystery; high key for happiness and comedy; and normal key for building exposure. Unusual effects require unusual lighting and these must be worked out by the cameraman.

Every light in a set-up has a certain duty to perform. The first step in lighting a set is to light the background to the key you desire. If the background is to play an important part in the scene, set the lighting in accordance to its importance. If the action is the most important part of the scene, subdue the background slightly.

Light Distribution

The second step is to place other light units to lift deep shadows caused by furniture or actors. Constantly view the scene through the camera finder and check for objectionable shadows as the actors rehearse the action. The third step necessary is the even distribution of light on actors as they move from one part of the set to another.

Watch for high reflections from your lights on wall pictures, windows or furniture. These "hot" spots reveal careless light planning on your part and stamp your efforts as amateurish. After the set is lighted, turn on the lamp for back-lighting on your actors and film the scene.

For low key lighting, we subdue the background to a great extent, leaving it only as a vague impression of its locality. Low key scenes call for deep shadows and cross lighting on the actors. Melodramatic scenes usually require the breaking of lighting rules to obtain the desired effect.

Flattered or Distorted

Some actions may require the placing of a light on the floor and illuminating the face from this low angle or using only the backlighting to give a silhouette effect without front lights.

Assume that you have two bank robbers in a hideout. They are standing on opposite sides of a table which has a kerosene lamp on it. By lighting from a low angle, we have the effect that the lamp is the source of light and the faces acquire a sinister look caused by the weird shadows.

In filming heavy drama, the use of strong highlights and deep shadows is permissible, which gives the picture a cold, harsh light that is appropriate for that type of picture.

Faces can be flattered or distorted by light. Prominent eyes can be made more attractive by casting a low key cross light on the face, whereas the use of a semi-flat light will lighten the shadows around deep set eyes. People with full faces can be lighted to appear thinner by casting shadows on the face and hollow cheeked persons are made fatter by removing the shadows in the cheeks.

The best facial closeup lighting is achieved by using few lights well placed so that the movement of the head won't cast a shadow which is objectionable to

the portrait Many closeups may be lighted from overhead with a weaker low angle light to lift the deep shadows in the eyes

One side of the face must always be a little lighter than the other side for roundness, and the general practice calls for the brighter illumination to be set on the left hand side of the screen

The majority of famous paintings indicate that the source of light is shining from the upper left hand side of the canvas. It seems unnatural for the light to fall from the right hand side of the picture and this rule should apply to motion picture photography

Picture Tempo

Lighting in motion pictures is directly related to the tempo of the pictures Tempo is the degree of speed with which the picture moves The action, if fast, makes it compulsory for the cameraman to illuminate his actors so that the eye easily views the action without other lights distracting

He should light as ably as possible, to give all assistance to the eye so that it will quickly grasp the important parts of the scene Fast action also requires less light diffusion as the characters do not remain still for any length of time to give the viewers the opportunity to notice the flaws revealed by the harsher light

Slow tempo gives the eye more time to explore each scene Composition can be more intricate and the lighting may be heavily diffused Scenes of slow tempo should tend to low key lighting, while fast tempo should be lighted in a higher key

Balancing of light in scenes needs the same attention as balance in composition If all of the light appears on one side of the screen with deep shadows occupying the other side, the picture appears heavy on the shadow side and the visual attention becomes riveted to the high lights

The range of latitude in panchromatic film is very great, but the bounds can be overstepped If a scene shows a man at a window looking outside into the garden, the outside sunlight would cause an overexposure in the garden, because we would have to use an f 19 opening for the man's exposure in the house.

The dim light in the house is greatly overbalanced by the outside sunlight This difference in light balance exceeds the latitude range of the film, resulting in an unsatisfactory picture To offset this difference and partially equalize the light intensities, we must shut off some of the sunlight, or increase the interior light

Balancing Light

By building your interior exposure so that you can film the man at f 4 5 or f 5 6 openings, you decrease the wide range and achieve a better light balance Light ratios should be kept within 1 3 for safety.

That is, if full exposure is 100 per cent the deepest major shadow cannot be less than 33 per cent of full exposure When light is properly balanced between this ratio, and your exposure is made for the shadow, the highlights will adjust and tune themselves to the shadows.

Improper balance is often done by using photoflood lamps in wall sockets or table lamps. By using 150 watt lamps in table lamps and 25 watt lamps in wall brackets you will acquire a more natural effect Photoflood lamps are too intense to use in these places

When lighting your actors, do not feel that their faces should be bathed with light at all times If your scene takes place in some dark room, you may use enough light to identify your actor, but it is not necessary to light him unnaturally merely for identification

You often know a character on the professional screen whose face may be in deep shadow If his face were well lighted, the light would appear unnatural for his surroundings, and you would question where the light originated

Light for naturalness and tempo. You must do with light what an artist does with a brush Light is a material aid for building composition, yet when wrongly applied may ruin good composition Good lighting means good pictures

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The Road to Bali

(Continued from Page 56)

The ceremonies are evidently an excuse for feasting by the natives, as there were innumerable eating stands all over the place After the ceremony of placing the body in the bier it is carried by hundreds of men to the cremation grounds, about half a mile away, and the body is then placed in a coffin carved in the form of a bull, and burned Later the ashes are scattered in the sea.

On the way back we made road shots of interesting things. On the road we saw several native wedding processions, and in the glare of the lights at night in the jungle we saw a small animal which looked somewhat like a fox, and which Koning informed me was called a mossung, and also added that they were "very stink."

The fellow who does the descriptive commentary on these pictures will probably end up with—"and so it is with deep regret that we say farewell to this beautiful isle," That's what he thinks

After I return to Batavia to a comfortable apartment—American coffee—an air-conditioned bedroom—and fried chicken Southern style, I am unable to figure out where he gets this "regret" angle

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Books

(Continued from Page 62)

Such things as line, spacing, mass, balance perspective and so on are just so many cogs in the machinery How they are put together depends upon the ingenuity and skill of the individual."

The author quotes Leonard Misonne the Belgian, whom we will requote "If I were asked what I have learned during my forty years' experience as a photographer I should reply: 'The most important thing is to observe the beautiful effects of atmosphere and light'

"Many photographers are concerned only with the subject and they seek to render as it is Often they fail to observe that the lighting and the atmosphere adorn and transform even the most humble and commonplace objects It is the effect that should be depicted and not the subject only To do this successfully the photographer should seek continually to develop his powers of observation so that he may acquire the ability to see well. These are the qualities that every successful pictorialist must possess."

More than twenty pages are devoted to a description of the pictures, which appear at the back of the book The text is devoted to General Considerations, i.e., learning to see pictorially, the mechanics of suggestion, suitability of subject, modernism Pictorial Composition in Principle, spacing massing, lines, balance, notan, suppression of detail, accent, figures in landscape, genre

Pictorial Composition in Practice, landscape values, color sensitivity of films, facts about color, aerial perspective, use of filters, film speed and fine grain

Exposure and print quality, linear perspective, applying the rules, the technique of pictorial photography, about the pictures

The preceding editions were issued in 1920 and 1932, abundant evidence the author not only knows whereof he speaks He has been a part of numberless changes in picturemaking

Rapid Theatre Building in South and Central America

Expanded theatre construction programs in Central America and the West Indies point toward increased sales by United States equipment manufacturers in the immediate future, according to H B Allinsmith, general manager of the Western Electric Company of Cuba

Although the European war has temporarily postponed expansion plans in British dependencies, the increase in American garrisons has boosted business at Puerto Rico and Panama, while the Latin American republics are forging ahead with building plans unprecedented in recent years Two thousand and 3000 seat houses are going up in Caracas and Baranquilla, while reports from Bogota show that the largest South American theatre is rising there

Los Angeles 8mm. Club

The January meeting of the Los Angeles 8mm. Club was held at the Eastman Auditorium, Hollywood. President William Wade introduced the members of the various committees for the year 1940. They were as follows:

Social, Ray Wilhelm, E. L. Emenegger, I. C. Dietze; technical, Paul Cramer, B. M. Bevans, A. B. Callow, shut-in, Vincent Hague; Through the Filter, T. H. McMurray, editor; ladies activities, Mrs. C. H. Taber; still photographers, Henry Huddleston, James B. Ridge, P. M. Niersbach; Projectionist, John Walter, Milton Armstrong; Sound, Jack Cornell, William Stull.

A contest for an appropriate slogan, not over 10 words, for the Los Angeles 8mm. Club was announced. The slogan desired should be one that is apt and typical of the activities, progress and aims of the club. The officers of the club, acting as judges, will announce the winner in the February meeting.

A well known radio announcer, Art Brearley, was introduced to the members. Mr. Brearley conducts a weekly photographic program, "The Studio Darkroom," which is broadcast over radio station KECA. Mr. Brearley invited members to be present at his next broadcast to photograph Mischa Auer, famous film comedian, whom he will interview over the air.

The remainder of the evening was devoted to screening of the balance of the contest entries which were not shown at the December meeting. Pictures were:

"Trail Riders" by Dr. Beller, "Blue Monday" by A. B. Callow, "Topics in the News" by Leo Caloia, "A Bible Story" by Frances Taber, "Watch the Birdie" by L. B. Reed, "Tell Me a Story" by Milton Armstrong, "Jungle Fever" by Doris Lee and Louise Arbogast.

LEO CALOIA, Secretary.

Some Amazing Figures in Photographic Industries

From simple experiments started more than a half century ago by George Eastman, America's laboratories have created new industries in photography having an annual sales volume of $1,720,000,000, according to an exhaustive survey issued by the International Economic Research Bureau of New York. New technological developments and patents have developed so rapidly that the industries' laboratories are more than five years ahead of the public.

The annual sales volume in photography is divided into the following main divisions. Professional motion picture industry, $1,000,000,000; amateur photography, $120,000,000, lithography, $200,000,000, photo-engraving, $100,000,000, tabloid picture newspapers, $70,000,000, studio portrait photography, $60,000,000, picture magazines, $50,000,000, developing and printing, $50,000,000, medical industrial and office photography, $40,000,000; industrial motion pictures, $30,000,000.

According to this survey, the billion dollar division—the motion picture industry is facing the "forties" with very serious obstacles due to the combined factors of high costs, excessive capitalizations, increasing taxes, lower foreign exchange rates, competition from abroad as well as a saturation in domestic "movie" attendance. Color and other new developments, however, are expected to play an increasing part in the future of the industry.

The annual banquet of the Philadelphia Cinema Club will be held on February 20. If it matches the affairs that have preceded it it will be a party.

Cinema Club of San Francisco

At the meeting January 16 of the Cinema Club of San Francisco the members viewed "San Francisco Salutes You," made by the Colortone Production Company's crew. There was disc accompaniment. Robert McCollester showed his "Golden Gate International Exposition." John Scmurr screened a film he recently made for Safeway Stores entitled "Wine Making in California—From Wine to the Bottle."

Officers were elected as follows. President, H. T. Kelley; vice president, John Scmurr, treasurer, R. E. Pettingill; secretary, Edwin L. Sargeant, directors, Robert S. McCollester, Russell A. Hanlon and Dr. J. A. Thatcher.

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Eveready Carrying Case Is Announced by Agfa Ansco

A new Eveready-type carrying case of unusual design has just been announced by Agfa Ansco of Binghamton, N Y, for use with the No 1 and 2 Agfa metal tripods

The new carrying case incorporates a unique design, which permits the tripod to be used at any time without removing it entirely from the case. When the tripod is to be set up, the case is opened but remains attached to one leg of the tripod, where it is out of the way and yet conveniently handy when the tripod is to be put away

This new feature should appeal to many amateurs, as it not only provides the answer to the question of where to put the case when the tripod is unpacked, but it also prevents possible loss or misplacement of the carrying case when the tripod is in use

The new Agfa Eveready-type carrying case is obtainable through regular photographic dealers at the list price of $1 75

Wolff Promoted

W A Wolff, advertising manager since 1929 of Western Electric Company and Electrical Research Products, Inc, a subsidiary, has been appointed information manager of both companies He is succeeded by H W Forster, information manager for the past ten years

Birdseye Changes Hands

Wabash Appliance Corporation, Brooklyn, N Y, has acquired complete control of Birdseye Reflector Lamps and will market these nationally along with their Superflash and Superflood Photo lamps

Adelaide Buys Titler

The South Australian Cine Society of Adelaide has purchased a complete titling outfit for the use of its members, reports the Movie News of Sydney The device enables all sorts of special effects with titles, such as revolving, receding, approaching and stage effects

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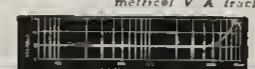

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Philadelphia Cinema Club

The Philadelphia Cinema Club's prize film contest is now history, and what a history it is

The largest number of films ever entered here in an amateur club's contest was presented for review and judgment before the entire membership, who were kept at it far into the night

Out of the entire assortment of films it was finally decided to list definitely in the order of selection six winners, all of whose films were 16mm, and all in color

The winners were as follows

First prize, "Tally-Ho," A L O Rasch, second, "Bermuda," Neil L Mac Morris, third, "Still of the Night," Leon M Bardfeld; fourth, "Valley Forge," Harold C Moock, fifth, "Westward" V E Woodcock, sixth, "Charleston Gardens," Rubert R Henderson.

To those members whose films were not included in the first six the committee expresses its appreciation for their efforts, for the time expended in preparation of the films and for their help in making one of the greatest amateur film contests of all time

B N LEVENE,
Chairman of Publications Committee

RabSons Offer Wide Service

RabSons Music and Camera Company, Inc, 111 West 52d Street, New York, announces the production of commercial, surgical, industrial and social moving pictures, educational films for school use and offer 16mm projection service. Also the company offers professional film editing Among the several types of pictures the company is prepared to contract for is that of social functions

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Dan Clark Discusses Cameras and Lights

(Continued from Page 66)

mentary, the complementary equipment," declared Mr Clark "Take these Dinky-Inkies we have here in this picture just four of them, with the Keglite at the top of the camera Outside of the Keg these four drew 1000 watts apiece

"This Dinky-Inkie is about the handiest little piece of equipment we have had in a long time We think so well of it here that we have bought thirty of them We plan to have four or five of them on each active set"

When the remark was passed that in some studios it was reported the cameramen had purchased the lights for their own use Mr Clark smiled

"Yes," he said "Leon Shamroy and Charlie Clark bought them on sight here There's so many things they can be used for it is almost impossible to enumerate them Their small size, too, gives them an advantage over some of the cumbersome equipment that preceded them

"It is no trouble at all to stow them away in auto dashlights or to put them inside of headlights They may be used in small yet important places with no waste of time In fact, they increase efficiency and speed in the little things that count big in the effectiveness of the whole

"By the way, this should be down your alley—in the fact the lamp is a natural for the amateur and likewise for the commercial photographer, too"

Agfa Lowers Triple S Pan, Superpan Press Cut Films

General adoption of Agfa Triple S Pan and Superpan Press cut films by professional, press and commercial photographers has made it possible to produce these films in quantities that permit an important saving to be passed on to the consumer

Prices on Agfa Triple S Pan and Superpan Press cut films are now reduced to that of Agfa Superpan Portrait, SS Pan and other Agfa panchromatic films With this price reduction it now becomes possible for photographers to obtain these two premium, high-speed films at regular, panchromatic cut film prices

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A BOON to 16mm Movie Camera users—eliminates PARALLAX between finder and lens—provides full size ground glass image magnified 10 times Adaptable to lenses 3 and up Also useful as extension tube for shorter focus lenses for close ups Exclusively used in shooting surgical operations small animal life etc

GOERZ *Parallax-Free* FOCUSER and FIELD FINDER CONTROL

for the same purpose, for Filmo 121 and Simplex Pockette magnifies 4 and 8x

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317 E 34th St New York, N. Y.

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Goerz American Produces Focuser and Field Finder

Many movie pocket cameras, handy as they are, lack the one important feature of a precise focusing and field control. The small direct view finder, with its lens axis considerably displaced from that of the photo-lens, causes a parallactic difference, that is, the finder does not show the same image area which the photo-lens includes

This difference increases rapidly for nearby objects Furthermore, the finder in such cameras cannot be used to check the exact focus of the photo-lens and the user must entirely rely on the focusing scale of the lens and his ability to judge distances correctly If objects at very close distances to the camera have to be taken this difficulty of bringing the lens into sharp focus on the film also increases

The owner of a Filmo 121 or a Simplex Pockette are advised that, in constructing the Goerz Parallax-Free Focuser and Field Finder Control, the Goerz Company has created a device which eliminates these troubles completely

Viewfinders Available for Filmo 70 and Double Eight

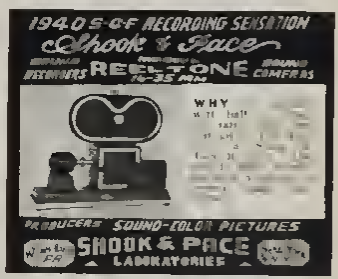
The positive type viewfinder on Filmo 141 and turret 8 cameras has proved so popular that this viewfinder is now being made available as an accessory for all Filmo 70 and Double Eight cameras in the field, regardless of their age

The viewfinder known to Hollywood technicians as "positive" has two great advantages. First, the image remains fixed on the viewfinder glass, regardless of how the operator's eye may shift around the eye-piece. In other words, eye-parallax is said to be entirely eliminated—very important in closeup filming

Secondly, the full image always fills the entire viewfinder glass, no matter how long a telephoto or how short a wide-angle lens may be used. There is no masking of the field for the longer lenses.

Equipment Houses Merge

S O S Cinema Supply Corporation has taken over International Theatre Accessories Corporation, with which S O S was affiliated for years.



Grand Canyon, Arizona looking north from the south rim. Enlargement by Eddie Foreman from 16mm. Kodachrome film.

Washington Club Sees Unusual Kodachrome

(Continued from Page 83)

The interest in the films viewed was so keen that Mr. Foreman was deluged with questions for more than an hour. In answer to one question he disclosed that practically the entire film had been exposed without benefit of exposure meter. This came as a surprise to most of us, who have made ourselves slaves in the use of a meter.

And, after the enjoyable evening spent in viewing the two films, the members of the club felt somewhat relieved only when Mr. Foreman promised to show more of his pictures at one of the early meetings of the club.

Nielson Sees No Sale Here; You Never Can Tell, Though

Charles Nielsen, manager of Martin Drug Store No. 1, Tucson, Arizona, who sells photographic equipment and supplies so fast he can't keep any stock on hand long enough to get acquainted with it, recently pulled a new one in the demonstration line.

Nielsen is continually making home and club demonstrations of movie equipment with both ears tuned up for possible sales. Recently he made a demonstration that caused him no little trouble, time and expense, and it was a demonstration that offered very little, if any, prospective sales.

Nevertheless Nielsen got a kick out of it and was pleased with the results. He packed his equipment into his car and drove approximately 35 miles up to the New Mountain Lemmon Road, which is under construction near Tucson, and gave a two hour show at the camp. His subjects were football games, news, fishing, rodeos and cartoons, and they were well received by his audience of some 140 Federal convicts who are engaged in constructing the new road.

Not much chance of future sales to any of his audience, but Nielsen was more than repaid in gratitude for his efforts and hopes to give several more shows at the camp.

Academy Awarding Oscar for Technical Achievement

This year the Academy of Motion Picture Arts and Sciences will again consider awards for scientific or technical achievement. Nominations are being requested for devices, methods, formulas, discoveries, or inventions of special and outstanding value which were actually employed in the motion picture industry during the calendar year 1939.

Nominations for this award, known as the "Award of the Academy Research Council for scientific or technical achievement" may be made by any individual, organization or company. Letters calling attention to the award and requesting nominations went out to all studios, technical department heads, producers, equipment manufacturers and development companies.

Nominations for the award will be considered by the Research Council, which will handle the details of selecting the achievement or achievements considered worthy of recognition in this awards classification. Nominations for the award closed Monday, January 22.

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This new Filmo—the finest of all 8 mm. projectors—bar none—now offers these features *which make a difference*: 400- or 500-watt lamp, gear drive throughout, fast F 1.6 lens, improved camera-matched film-moving mechanism, lens focus lock, two-way tilt, radio interference eliminator, and tripod socket. With case, only $118.

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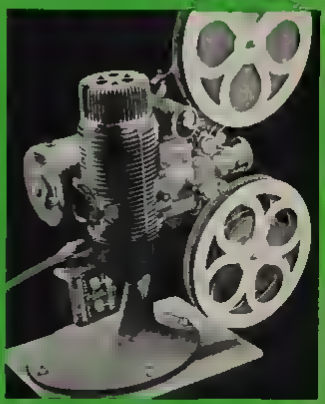
Filmo-Master 16 mm. includes de luxe features heretofore found only in higher-priced Filmos. It is completely gear-driven and has a speedy power rewind. Brilliant pictures in home or small auditorium are assured by its 750-watt lamp, fast two-inch F 1.6 lens, and Magnilite condenser. With case, only $139.



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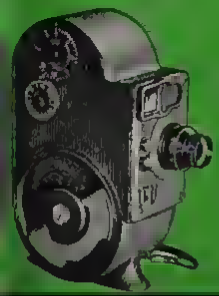
Palm-size Filmo 8 offers an amazing variety of movies! Makes color movies or black-and-white, indoors and out, even in slow motion. Has four speeds, single exposure for animating cartoons, masks for use with telephoto lenses, and can be equipped with rewind for making dissolves and double exposures. With F 3.5 lens, speeds 8, 16, 24, 32, only $49.50. With F 2.5 lens, speeds to 64, $75.

New 16 mm. Filmo 141 *Only* **$115**

⬅ SHELLOADING. Filmo 141 gives movie makers a new freedom from gadgets. It loads with pre-threaded 16 mm. film magazines. Permits mid-reel changes from color to black-and-white. No threading! Has four speeds and single frame exposure. New "positive" finder eliminates off center pictures. Uses all special lenses. With one-inch F 2.7 lens, $115.



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Filmo Turret 8 provides all features of single-lens-seat Filmo, at left, plus instant readiness provided by turret mount of three lenses and matching finders. When a lens is in position, its matching finder unit is too. Has new eye-parallax-correcting viewfinder, critical focuser; four speeds, including slow motion, single frame exposure. With 12½ mm. F 2.5 lens, $140.

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